

<400> 4185  
Met Gly Ser Ser Leu Ala Phe Ile Leu Phe Leu Pro  
1 5 10

<210> 4186  
<211> 8  
<212> PRT  
<213> Homo sapiens

<400> 4186  
Gly Leu Ser Tyr Phe Leu Asp His  
1 5

<210> 4187  
<211> 99  
<212> PRT  
<213> Homo sapiens

<400> 4187  
Met Arg Leu Gly Arg Trp Gly Leu Arg Met Trp Pro Trp Arg Val Leu  
1 5 10 15  
Phe Leu Ala Gly Ala Ser Pro Ser Gln Leu Gln Glu Met Gly Cys Arg  
20 25 30  
Cys Thr Ser Thr Ala Gln Ser Ser Ala Gly Glu Gly Ser Lys Thr Ser  
35 40 45  
Leu His Pro Asp Pro Arg Val Cys Arg Ser Phe Gln Leu Leu Ala Pro  
50 55 60  
Trp Arg Met Gly Arg Glu Gly Glu Arg Gly Arg Trp Val Glu Asp Ser  
65 70 75 80  
Thr Gly Ala Trp Pro His Asp Gly Cys Asn Ala Ala Thr Phe Ser Val  
85 90 95  
Gly His Val

<210> 4188  
<211> 19  
<212> PRT  
<213> Homo sapiens

<400> 4188  
Ala Phe Ile Asn Ser Cys Ile Phe Phe Pro Leu Phe Leu Leu Ala Tyr  
1 5 10 15  
Tyr Val Tyr



<210> 4189  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 4189  
 Asp Ser Phe Ile Gly Glu Trp Val Val Ala Leu Gly Lys Val Leu Pro  
   1                  5                  10                  15  
 Tyr Cys Leu Phe  
                   20

<210> 4190  
 <211> 42  
 <212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (34)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4190  
 Met Lys Gly His Tyr Pro Cys Ala Trp Met Ser Leu Ser Trp Phe Arg  
   1                  5                  10                  15  
 Thr Leu Ser Ala Met Ile Tyr Cys Leu Leu Tyr Ile Asp Lys Ser Ser  
                   20                  25                  30  
 Ile Xaa Phe Phe Thr Asn Glu Arg Arg Ile  
           35                  40

<210> 4191  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 4191  
 Met Gly Cys Glu Leu Trp Ile Ser Ala Ala Trp Ile Ser Ala Val Trp  
   1                  5                  10                  15  
 Cys Ser Asn Arg Leu His Asn Leu Val Glu Ser Gln Ser Ser His Leu  
           20                  25                  30

<210> 4192  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 4192  
 Asp Lys Phe Leu Ile Phe Ser Tyr Phe Cys Leu Cys Leu Phe Met Pro  
   1                  5                  10                  15



Leu Ile Pro

<210> 4193  
<211> 26  
<212> PRT  
<213> Homo sapiens

<400> 4193  
Met Pro Trp Tyr Phe Ser Pro Ser Leu Leu Trp Ser Leu Phe Gln Trp  
1 5 10 15

Ser Asp Ser Glu Ala Gly Ser Arg Leu Cys  
20 25

<210> 4194  
<211> 35  
<212> PRT  
<213> Homo sapiens

<400> 4194  
Met Ser Leu Pro Met Ser Phe Phe Ile Leu Ser His Leu Ser Ser Phe  
1 5 10 15

Met Ile Cys Thr Tyr Gly Lys Asp Tyr Ser His Phe Thr Asp Glu Gly  
20 25 30

Ala Phe Thr  
35

<210> 4195  
<211> 52  
<212> PRT  
<213> Homo sapiens

<400> 4195  
Met Pro Leu Ala Ile Phe Ala Leu Val Asp Leu Phe Trp Val Ser Ser  
1 5 10 15

Phe Ser Asn Ile Asn Val Pro Lys Asp His Leu Val Lys Cys Leu Arg  
20 25 30

Phe Arg Val Leu Ser His Pro Glu Arg Ser Gly Leu Asn Arg Ser Arg  
35 40 45

Asn Leu His Phe  
50

<210> 4196  
<211> 38  
<212> PRT  
<213> Homo sapiens



Table 1. Demographic characteristics of the study population	
Age (years)	Mean (SD)
18-24	20.5 (2.5)
25-34	29.5 (4.5)
35-44	39.5 (5.5)
45-54	49.5 (6.5)
55-64	59.5 (7.5)
65-74	69.5 (8.5)
75-84	79.5 (9.5)
85-94	89.5 (10.5)
95-104	99.5 (11.5)
105-114	109.5 (12.5)
115-124	119.5 (13.5)
125-134	129.5 (14.5)
135-144	139.5 (15.5)
145-154	149.5 (16.5)
155-164	159.5 (17.5)
165-174	169.5 (18.5)
175-184	179.5 (19.5)
185-194	189.5 (20.5)
195-204	199.5 (21.5)
205-214	209.5 (22.5)
215-224	219.5 (23.5)
225-234	229.5 (24.5)
235-244	239.5 (25.5)
245-254	249.5 (26.5)
255-264	259.5 (27.5)
265-274	269.5 (28.5)
275-284	279.5 (29.5)
285-294	289.5 (30.5)
295-304	299.5 (31.5)
305-314	309.5 (32.5)
315-324	319.5 (33.5)
325-334	329.5 (34.5)
335-344	339.5 (35.5)
345-354	349.5 (36.5)
355-364	359.5 (37.5)
365-374	369.5 (38.5)
375-384	379.5 (39.5)
385-394	389.5 (40.5)
395-404	399.5 (41.5)
405-414	409.5 (42.5)
415-424	419.5 (43.5)
425-434	429.5 (44.5)
435-444	439.5 (45.5)
445-454	449.5 (46.5)
455-464	459.5 (47.5)
465-474	469.5 (48.5)
475-484	479.5 (49.5)
485-494	489.5 (50.5)
495-504	499.5 (51.5)
505-514	509.5 (52.5)
515-524	519.5 (53.5)
525-534	529.5 (54.5)
535-544	539.5 (55.5)
545-554	549.5 (56.5)
555-564	559.5 (57.5)
565-574	569.5 (58.5)
575-584	579.5 (59.5)
585-594	589.5 (60.5)
595-604	599.5 (61.5)
605-614	609.5 (62.5)
615-624	619.5 (63.5)
625-634	629.5 (64.5)
635-644	639.5 (65.5)
645-654	649.5 (66.5)
655-664	659.5 (67.5)
665-674	669.5 (68.5)
675-684	679.5 (69.5)
685-694	689.5 (70.5)
695-704	699.5 (71.5)
705-714	709.5 (72.5)
715-724	719.5 (73.5)
725-734	729.5 (74.5)
735-744	739.5 (75.5)
745-754	749.5 (76.5)
755-764	759.5 (77.5)
765-774	769.5 (78.5)
775-784	779.5 (79.5)
785-794	789.5 (80.5)
795-804	799.5 (81.5)
805-814	809.5 (82.5)
815-824	819.5 (83.5)
825-834	829.5 (84.5)
835-844	839.5 (85.5)
845-854	849.5 (86.5)
855-864	859.5 (87.5)
865-874	869.5 (88.5)
875-884	879.5 (89.5)
885-894	889.5 (90.5)
895-904	899.5 (91.5)
905-914	909.5 (92.5)
915-924	919.5 (93.5)
925-934	929.5 (94.5)
935-944	939.5 (95.5)
945-954	949.5 (96.5)
955-964	959.5 (97.5)
965-974	969.5 (98.5)
975-984	979.5 (99.5)
985-994	989.5 (100.5)
995-1004	999.5 (101.5)
1005-1014	1009.5 (102.5)
1015-1024	1019.5 (103.5)
1025-1034	1029.5 (104.5)
1035-1044	1039.5 (105.5)
1045-1054	1049.5 (106.5)
1055-1064	1059.5 (107.5)
1065-1074	1069.5 (108.5)
1075-1084	1079.5 (109.5)
1085-1094	1089.5 (110.5)
1095-1104	1099.5 (111.5)
1105-1114	1109.5 (112.5)
1115-1124	1119.5 (113.5)
1125-1134	

Phe Asn Lys Phe Ile Leu Ser Cys Asn Asn His His Asp Gln Phe Thr  
20 25 30

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<210> 4197
<211> 20
<212> PRT
<213> Homo sapiens
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<400> 4197  
Met Ser Trp Leu Arg Ile Ile Leu Ser Met Leu Lys Thr Ala Phe Glu  
1 5 10 15

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<210> 4198
<211> 55
<212> PRT
<213> Homo sapiens
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<400> 4198  
Met Cys Thr Ser Phe Met Gln Leu Trp Phe Val Leu Gly Leu Ala Asp  
1 5 10 15

Leu Gly Trp Ala Trp Leu Gln Ala Ile Cys Leu Val His Val Cys Ser  
20 25 30

Leu His Leu Ser Leu Phe Trp Asp Gln Gln Val Thr Gln Gly Met Leu  
35 40 45

Pro Ser Trp Pro Trp Lys Asn  
50 55

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<210> 4199
<211> 31
<212> PRT
<213> Homo sapiens
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<400> 4199
Met Leu Leu Ile Leu Phe Phe Ile Gln Val Thr Gly Cys Ile Arg Glu
   1                   5               10                  15
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Met Val Trp Ala Phe Lys Gly Ile Thr Glu Lys Gly Ile Ser Tyr  
20 25 30



<210> 4200  
<211> 6  
<212> PRT  
<213> Homo sapiens

<400> 4200  
Ala Gly Ala Val Phe Gly  
1 5

<210> 4201  
<211> 44  
<212> PRT  
<213> Homo sapiens

<400> 4201  
Met Phe Ser Leu Leu Arg Ala Phe Pro Ser Asp Arg Cys Pro Cys Pro  
1 5 10 15  
Ala Ala Ser Thr Gly Trp Gln Arg Ala Arg Ala Ser Ala Pro Lys Leu  
20 25 30  
Ser Cys Arg Ala Leu Arg Pro Arg Val Cys Pro Gln  
35 40

<210> 4202  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 4202  
Met Pro Ser Leu Ile Phe Ile Ile Ser Phe Phe Leu Leu Ala Val Asp  
1 5 10 15  
Leu Val Cys Pro Ser Phe Ser Cys Ser Leu Arg Cys Ala Gly Asn Leu  
20 25 30  
Phe Leu

<210> 4203  
<211> 74  
<212> PRT  
<213> Homo sapiens

<400> 4203  
Met Arg Ser Ser Leu Trp Ser Ser Ser Ser Leu Leu Ser Leu Met Ala  
1 5 10 15  
Asn Phe Pro Ala Gln Thr Ser Ala Ser Gly Leu Phe Pro Ser Val His  
20 25 30  
Thr Asp Phe Phe Pro Ser Pro Val Pro Ser Trp Arg Val Gly Pro Ser  
35 40 45  
Ala Ala Ala Leu Gly His Ser Gln Asp Lys Val Leu Val Tyr Leu Gly



60

2006



Gln

<210> 4207  
<211> 42  
<212> PRT  
<213> Homo sapiens

<400> 4207  
Met Ser Pro Val Leu His Leu Arg Arg Leu Ala Arg Cys Ile Leu Phe  
1 5 10 15  
His Leu Pro Gln Phe Ser Ser Ser Val Lys Arg Pro His Gly Phe Gly  
20 25 30  
Ala Asn Arg Met Thr Asp Lys Arg Asp Lys  
35 40

<210> 4208  
<211> 35  
<212> PRT  
<213> Homo sapiens  
  
<400> 4208  
Met Tyr Leu Leu Ile Asn Lys Leu Tyr Ile Phe Cys Met Phe Thr Gln  
1 5 10 15  
Thr Val Leu Val Leu Glu Ser Pro His His Leu Asn Phe Val Gly Glu  
20 25 30  
Phe Cys Lys  
35

<210> 4209  
<211> 55  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (33)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4209  
Met Trp Leu Thr Lys Lys Phe Lys Leu Asn Val Arg Leu Thr Phe Cys  
1 5 10 15  
Phe Tyr Trp Thr Ala Gln Val Glu Lys Val Ser Glu His Lys Thr Pro  
20 25 30  
Xaa Lys Tyr Ile Phe His Trp Asp Trp Gly Trp Val Leu Trp Gly Lys  
35 40 45  
Cys Ile Gly Ala Gly Gln Cys  
50 55



<210> 4210  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 4210  
 Met Ser Asp Ala Pro Leu Gly Val Trp Val Leu Leu Gln Ala Val Arg  
 1 5 10 15  
 Cys Ser Pro Gly Cys Val Gly Thr Ala Pro Asp Ser Pro Met Leu Thr  
 20 25 30  
 Cys Gly Cys Gly Cys Cys Ser Arg Pro Ser Asp Ala His Leu Gly Val  
 35 40 45  
 Trp Val Leu Leu Gln Val Val Arg Cys Ser Pro Trp Ala Met Gly Ala  
 50 55 60  
 Ala Thr Cys Cys Gln Met Leu Thr Ser Gly Cys Gly His Cys Ser Gly  
 65 70 75 80  
 Leu Ser Asp Ala Arg Leu Trp Leu Trp Ala Leu Leu  
 85 90

<210> 4211  
 <211> 83  
 <212> PRT  
 <213> Homo sapiens

<400> 4211  
 Pro Leu Gln Ser Ser Pro Trp Arg Leu Leu Phe Arg Gly His Leu Pro  
 1 5 10 15  
 Val Leu Ser Gly Gly Ser Val Pro Ala Ser Ala Pro Gly Ser His Pro  
 20 25 30  
 Cys Pro Ala His Glu Gly Ala His Pro Trp Thr Tyr Leu Ser Ser Pro  
 35 40 45  
 Thr Thr Ser Leu Ala Phe Asn Gly Ser Gly Ile Arg Asp Arg Gly Ala  
 50 55 60  
 Thr Arg Gln Arg Ala Pro Gly Gly Leu Met Gly Gly Arg Gly Lys Ser  
 65 70 75 80  
 Arg His Cys

<210> 4212  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 4212



Met Cys Val Gly Lys Asp Phe Phe Trp Phe Leu Leu Phe Gly Phe Ala  
 1 5 10 15

Gln Ile Leu Glu Ser Val Gly Leu His Leu Leu Pro Asn Leu Lys Ser  
 20 25 30

Phe Leu Ser Leu Phe Leu  
 35

<210> 4213  
 <211> 54  
 <212> PRT  
 <213> Homo sapiens

<400> 4213  
 Met Arg Arg Cys Thr Leu Glu Gly Asn Arg Trp Leu Leu Phe Leu Cys  
 1 5 10 15

Val Val Trp Asn Gly Trp Gln Lys Val Ser Glu Leu Cys Gly Arg Gln  
 20 25 30

His Gly Ala Lys Gly Thr Val Ser Pro Ser Ser Pro Leu Pro Leu Ser  
 35 40 45

Gln Thr Pro Ala Asp Ile  
 50

<210> 4214  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 4214  
 Thr Ser Leu Ile Leu Cys Cys Leu Ser Thr Tyr Leu Leu Ser Leu Tyr  
 1 5 10 15

Cys Gly Pro Cys Thr Tyr  
 20

<210> 4215  
 <211> 41  
 <212> PRT  
 <213> Homo sapiens

<400> 4215  
 Met Asp Ile Leu Phe Phe Phe Leu Phe Tyr Phe Leu Gln Glu Arg Leu  
 1 5 10 15

Gly Phe Ser Thr Val Ser Asn Lys Ser Ser Gly Val Ile Phe Phe Pro  
 20 25 30

Val Val Leu Pro Gln Pro Pro Glu Ser  
 35 40



<210> 4216  
 <211> 35  
 <212> PRT  
 <213> Homo sapiens

<400> 4216  
 Met Cys Ile Ala Ile Val His Ser Leu Ser Leu Pro Tyr Gly Thr Pro  
   1                  5                  10                  15  
 Leu Tyr Glu Pro Ser Ile Tyr Cys Ile Tyr Gly Cys Gly Thr Asn Tyr  
           20                  25                  30  
 Pro Lys Thr  
           35

<210> 4217  
 <211> 71  
 <212> PRT  
 <213> Homo sapiens

<400> 4217  
 Met Asn Trp Arg Ser Cys Lys Leu Gly Ser Val Tyr Tyr Tyr Arg Phe  
   1                  5                  10                  15  
 Cys Thr Val Ser Pro Arg Val Leu Val Lys Gln Asp Gly Gly Arg Gly  
           20                  25                  30  
 Thr Ser Phe Pro Ser Phe Thr Ser Leu Arg Ser Ile Phe Ser Ile Phe  
           35                  40                  45  
 Tyr Asn Phe Ala Phe Gly Lys Gly Leu Leu Ile Ser Trp Glu Phe Arg  
   50                  55                  60  
 His Ile Leu Lys Ile Ser Pro  
   65                  70

<210> 4218  
 <211> 4  
 <212> PRT  
 <213> Homo sapiens

<400> 4218  
 Met Val Ser Cys  
   1

<210> 4219  
 <211> 35  
 <212> PRT  
 <213> Homo sapiens

<400> 4219  
 Met Pro Gly Ser Cys Phe Ser Trp Ser Phe Ser Arg Leu Leu Gly Val  
   1                  5                  10                  15



Phe Leu Ser Leu Gln Cys Ser Trp Lys Thr Val Tyr Gly Ile Leu Ser  
 20 25 30

Arg Glu Ala  
 35

<210> 4220  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 4220  
 Met Gly His Ile Phe Trp Met Cys Ala Leu Lys Leu Ile Leu Leu Ala  
 1 5 10 15

Arg Arg Lys Lys Gly Asp Ala Ser Val Ser Asn Ile Leu Asp Thr  
 20 25 30

<210> 4221  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 4221  
 Met Leu His Phe Tyr Thr Ile Lys Phe Ile Phe Ser Ile Val Cys Leu  
 1 5 10 15

Leu Ala Pro Ile Gly Ser Arg  
 20

<210> 4222  
 <211> 29  
 <212> PRT  
 <213> Homo sapiens

<400> 4222  
 Met Tyr Leu Ile Phe Val Tyr Cys Val Val Leu Phe Phe Val Ser Ala  
 1 5 10 15

Leu Thr Gly Val Ala Gly Gly Ala Pro Ser Glu Met His  
 20 25

<210> 4223  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 4223  
 Met Ile Lys Leu Asn Thr Ser Phe Ser Ile Phe Asn Ala Ala Met Leu  
 1 5 10 15

Leu Tyr Leu Trp  
 20



<210> 4224  
 <211> 35  
 <212> PRT  
 <213> Homo sapiens

<400> 4224  
 Met Asn Asn Pro Gln Ser Pro Gly Leu Ile Leu Phe Thr Trp Leu Ser  
 1 5 10 15  
 Cys Leu Phe Ala Phe Arg Ser Val Leu Ala Ser Ser Leu Ser Lys Arg  
 20 25 30  
 Ile Arg Ala  
 35

<210> 4225  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 4225  
 Met His Arg Arg Asp Leu Ser Val Cys Val Cys Leu Cys Leu Cys Pro  
 1 5 10 15  
 Ser Leu Ser Leu Ser Leu Cys Lys Thr Arg Ile His Cys Cys Arg Glu  
 20 25 30  
 Leu Pro Gln Ile Ala Pro  
 35

<210> 4226  
 <211> 68  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (22)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4226  
 Met Trp His Met Met Ser Phe Thr Pro Cys Ser Leu Pro Cys Ser Leu  
 1 5 10 15  
 Ala Leu Cys Leu Pro Xaa Gly Pro Ala Cys Leu Pro Pro Val Pro Leu  
 20 25 30  
 Pro Leu Thr Ser Asn Ile Gln Leu Lys Ala Lys Ala Gly Leu Leu Leu  
 35 40 45  
 Arg Gln Arg Leu Cys Ser Ile Ala Ser Val His Leu Pro Ala Leu Leu  
 50 55 60  
 Val Ser Ala Arg



<210> 4227  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 4227  
 Met Tyr Val Arg Leu Asn Val Thr Tyr Tyr Leu Gly Leu Phe Phe Lys  
   1                  5                  10                  15  
 Leu Lys Phe Ala Leu Ala Leu Gln Pro Ala Arg Gln Gly Val Ile Thr  
           20                  25                  30

<210> 4228  
 <211> 54  
 <212> PRT  
 <213> Homo sapiens

<400> 4228  
 Met Leu Pro Asn Ile Val Leu Pro Ser Trp Cys Leu Val Cys Leu Val  
   1                  5                  10                  15  
 Gln Phe Ser Phe Thr Phe Leu Ser Pro Ser His Ser Pro Arg Ile Val  
           20                  25                  30  
 Thr Thr Gly Leu Tyr Thr Pro Gly Arg His Glu Pro Asn Leu Leu Ser  
       35                  40                  45  
 Cys Ser Leu Leu His Leu  
       50

<210> 4229  
 <211> 6  
 <212> PRT  
 <213> Homo sapiens

<400> 4229  
 Met Arg Thr Arg Leu Trp  
   1                  5

<210> 4230  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (6)  
 <223> Xaa equals any of the naturally occurring L-amino acids



<400> 4230

Met Ala Ala Ile Gly Xaa Asn Gly Phe  
1 5

<210> 4231

<211> 25

<212> PRT

<213> Homo sapiens

<400> 4231

Met Ala Leu Asn Trp Leu Thr Leu Leu Leu Thr Trp Thr Phe Glu Ser  
1 5 10 15

Tyr Val Val Thr Tyr Phe Pro His Leu  
20 25

<210> 4232

<211> 23

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4232

Met Cys Ala Asp Leu Pro Gly Pro Val Gly Xaa Ala Asp Val Gly Pro  
1 5 10 15

Gly Ser Tyr Pro Gly Ile Trp  
20

<210> 4233

<211> 64

<212> PRT

<213> Homo sapiens

<400> 4233

His Met His Thr Ala Val Ala His Thr Ser Leu Ser Leu Ser Leu Val  
1 5 10 15

Thr Val Leu Pro Cys Asp Ser His Pro Ser Asp Arg Pro Cys Ser Leu  
20 25 30

Ala Ala Pro Ser Thr Gly Arg Gly Leu Ala Trp Cys Pro Val Ser Val  
35 40 45

Cys Leu His Arg Ala Gly Arg Phe His Lys Asp Trp Leu Met Ser Arg  
50 55 60



<210> 4234  
<211> 5  
<212> PRT  
<213> Homo sapiens

<400> 4234  
Met Ala Leu Pro Thr  
1 5

<210> 4235  
<211> 32  
<212> PRT  
<213> Homo sapiens

<400> 4235  
Met Gly Ser Pro Gly Ala Leu Leu Ala Leu Leu Pro Ser Leu Leu Pro  
1 5 10 15  
Phe Ser Trp Gly Leu Gly Pro Trp Pro Leu Leu Ser Ser Pro Lys Thr  
20 25 30

<210> 4236  
<211> 36  
<212> PRT  
<213> Homo sapiens

<400> 4236  
Met Phe Ile Trp Val Gly Val Ser Leu Cys Leu Met Phe Thr Val Ala  
1 5 10 15  
Ile Asp Ala Arg Asp Phe Arg Phe Leu Ser Cys Pro Asn Phe Tyr Leu  
20 25 30  
Pro Phe Asp Phe  
35

<210> 4237  
<211> 18  
<212> PRT  
<213> Homo sapiens

<400> 4237  
Met Thr Ile Pro Ser Leu Asn Asp Phe Val Cys Arg Ile Leu Leu Leu  
1 5 10 15  
Leu Asn



<210> 4238  
<211> 57  
<212> PRT  
<213> Homo sapiens

<400> 4238  
Lys Ser Ala Arg Ile Arg Ile Phe Leu Ile Pro Leu Cys Ser Thr Ser  
1 5 10 15  
Leu Pro Ile Pro Lys Phe Leu Pro Leu Gly Arg Lys Phe Leu Leu Leu  
20 25 30  
Leu Phe Asp Leu Ile Phe Asn Ser Ile Ser Met Ile Phe Cys Phe Val  
35 40 45  
Phe Phe Phe Leu Arg Met Thr Val Phe  
50 55

<210> 4239  
<211> 43  
<212> PRT  
<213> Homo sapiens

<400> 4239  
Asn Cys Asn Leu Leu Phe Ala Cys Ile Val Ile Leu Val Tyr Ala Leu  
1 5 10 15  
Phe Asp Ile Ser Cys Leu Pro Tyr Leu Tyr Leu Lys Tyr Ser Lys Tyr  
20 25 30  
Leu Phe Leu Tyr Ile Phe Gly Lys Asn Ile Phe  
35 40

<210> 4240  
<211> 56  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (16)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (21)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (54)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4240  
Met Gly Arg Phe Trp Ala Trp His Ile Ile Ala Ser Leu Leu Leu Xaa  
1 5 10 15



His Thr Ile Phe Xaa Arg Asn Asn Ser Glu Ser Gln Glu Val Lys Glu  
20 25 30

Asn Ala Ile Ser Thr Leu Cys Arg Ile Glu Arg His Leu Thr Asn Arg  
35 40 45

Cys Gly Ser Gln Ile Xaa Ile Phe  
50 55

<210> 4241  
<211> 6  
<212> PRT  
<213> Homo sapiens

<400> 4241  
Trp Met His Thr Gly His  
1 5

<210> 4242  
<211> 49  
<212> PRT  
<213> Homo sapiens

<400> 4242  
Phe Phe Ala Phe Leu Gly Pro Phe Pro Phe Thr Leu Ile Ser Leu Ser  
1 5 10 15  
Arg Gly Leu Gln Phe Pro His Asn Arg Phe Asp Arg Arg Lys Ile Leu  
20 25 30  
Asn Trp Glu Ala His Arg Gly Lys Arg Thr Ala Phe Leu Arg Ile Pro  
35 40 45

Val

<210> 4243  
<211> 66  
<212> PRT  
<213> Homo sapiens

<400> 4243  
Met Ile Lys Ile Gly Ser Gln Asn Lys Gln Lys Arg Lys Lys Ser Arg  
1 5 10 15  
Lys Phe Leu Pro Ala Cys Ser Leu Cys Met Leu Leu Cys Asn Val Ile  
20 25 30  
Leu Leu Leu Ala Pro Ser Arg Asp Gly Ser Pro Glu Ser Glu Leu Asp  
35 40 45  
His Val Asn Cys Phe Asp His Trp Ser Ile His Lys His Gly Thr Thr  
50 55 60

Glu Ala



65

<210> 4244  
<211> 30  
<212> PRT  
<213> Homo sapiens

<400> 4244  
Met Trp Cys Met Leu Asp Ile Thr Phe Leu Leu Gly Leu Trp Asn Phe  
1 5 10 15

Gly Ile Cys Gln Ala Glu Gly Ile Asn Val Thr Thr Pro Gln  
20 25 30

<210> 4245  
<211> 67  
<212> PRT  
<213> Homo sapiens

<400> 4245  
Met Trp Arg Gln Lys Thr Leu Tyr Phe Thr Phe Leu Leu Asn Val Ser  
1 5 10 15

Phe Ser Leu Tyr Phe Ser Phe Ser Leu Trp Tyr Phe Phe Thr Pro Cys  
20 25 30

Pro His Pro His Pro Pro Thr Pro Thr Leu Ala Leu Pro Asn Ala Thr  
35 40 45

Lys Ile Val Leu Ile Arg Thr Pro Gly Ser Pro Thr Asn Arg Ser Asp  
50 55 60

Thr Ile Asn  
65

<210> 4246  
<211> 52  
<212> PRT  
<213> Homo sapiens

<400> 4246  
Gly Ala Thr Gly Met Trp Arg Cys Arg Gly Tyr Trp Ala Pro Gly Gln  
1 5 10 15

Asn Ala Ile Trp Trp Leu Ala Leu Lys Met Val Leu Cys Cys Ser Cys  
20 25 30

Leu Gly Leu Gly Glu Phe Met Arg Pro Ser Met Ser Ser Leu Ser Gly  
35 40 45

Ala Val Pro Leu  
50



<210> 4247  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 4247  
 Met Leu Cys Ser Leu Ser Leu Ser Leu Leu Leu Phe Ala Asn Ser Ser  
 1 5 10 15  
 Thr Leu Asn Pro Lys Ser  
 20

<210> 4248  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens

<400> 4248  
 Met Pro Val His Ser His Thr Pro Val Glu Arg Leu Val Tyr Leu Thr  
 1 5 10 15  
 Leu Phe Phe Ser Leu Leu Lys Lys Cys His Leu Thr Asn Ser Ile Thr  
 20 25 30  
 Ser

<210> 4249  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 4249  
 Cys Cys Val Leu Lys Ile Phe Gly Ser  
 1 5

<210> 4250  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 4250  
 Met Tyr Thr Phe Ala Cys Val His Val Cys Thr Cys Val Cys Leu Cys  
 1 5 10 15  
 Ala Tyr Leu Ser Val Cys Val His Ile Cys Met Tyr Met Gly Pro Val  
 20 25 30  
 Ile Ala Ala Arg Leu Leu Pro Arg Ala Phe Ser Ala Arg Trp Pro Cys  
 35 40 45  
 Leu Cys Ser Phe Cys Gln Pro Arg Gly Ala Glu Trp Pro Ser Ser Gln  
 50 55 60  
 Pro Gln Trp Ala Gln Trp Gly Gly Pro Ser Ser Glu Gly Thr Arg Ala



65		70		75		80
Ala Ala Ser Pro Val Phe Pro His Ala Val Leu Arg Ala Pro Val His						
	85			90		95
Glu Pro His Ser Gln Glu Gln Ser Pro Arg His Leu Ser His Leu Gly						
	100		105			110
His Pro Trp Pro Cys Val Arg Ser Gln Ser Leu Glu Gly Phe Val His						
	115		120			125
Gln Ala Trp Asp Pro Gly Ile Leu Pro Gln Ser Pro Pro Ala Trp Gly						
	130		135			140
Gln Cys Gly Gly Trp Arg Gly Trp Arg Val Ala Arg Val Ala Gly						
	145		150		155	

<210> 4251  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 4251  
 Met Arg Asn Leu Glu Val Met His Ser Arg Ser Leu Gly Ile Cys Asp  
 1 5 10 15  
 Ser His Ser Val Arg Cys Phe  
 20

<210> 4252  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 4252  
 Met Thr Gly Lys Met Thr Val Met Met Arg Ile Pro Ser Ser Ile Val  
 1 5 10 15  
 Thr Asn Thr Ala Met Glu Ser Glu Val Pro Gly Phe Lys Thr Gln Val  
 20 25 30  
 Tyr Arg Ser Leu Ala Val  
 35

<210> 4253  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

<400> 4253  
 Met Arg His His Val Ala Val Leu Pro Leu Gly Ser Asn Val Leu Lys  
 1 5 10 15  
 Leu Leu Cys Leu Phe Phe Glu Arg Asn Ile Ser Arg Glu Val Pro Lys  
 20 25 30



Ser Ser Leu Val Ile Ser Phe Asn Asp Ala Glu Ile Leu Val Lys Lys  
 35 40 45

Leu Gly Ser Leu Pro  
 50

<210> 4254  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 4254  
 Met Ile Thr Ala Ile Gly Ile Phe Thr Cys Ile Leu Leu Ser Phe Ile  
 1 5 10 15  
 Ser Pro Met Tyr Ile  
 20

<210> 4255  
 <211> 37  
 <212> PRT  
 <213> Homo sapiens

<400> 4255  
 Met Tyr Phe Pro Ile Ile Cys Phe Arg Leu Phe Leu Phe Thr Glu Met  
 1 5 10 15  
 Ile Phe Ser Lys Ile Gly Thr Thr Lys Lys Leu Gln Met Gln Thr Tyr  
 20 25 30  
 Val Ile Ser Leu Leu  
 35

<210> 4256  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 4256  
 Ala Thr Arg Gly Gly Trp Leu Phe Arg Ala Ile Pro Ala Ser Val Glu  
 1 5 10 15  
 His Gly Arg Val Tyr Val Gly Asn Val Ala Trp Met His Val Leu Ala  
 20 25 30  
 Ala Arg Glu Leu Glu Gln Arg Ala Ala Leu Met Gly Gly Gln Val Tyr  
 35 40 45  
 Phe Cys Tyr Asp Gly Ser Pro Tyr Arg Ser Tyr Glu Asp Phe Asn Met  
 50 55 60  
 Glu Phe Leu Gly Pro Cys Gly Leu Arg Leu Val Gly Ala Arg Pro Leu  
 65 70 75 80



Leu Pro Tyr Trp Leu Leu Val Phe Leu Ala Ala Leu Asn Ala Leu Leu  
                             85                            90                            95  
 Gln Trp Leu Leu Arg Pro Leu Val Leu Tyr Ala Pro Leu Leu Asn Pro  
                             100                            105                            110  
 Tyr Thr Leu Ala Val Ala Asn Thr Thr Phe Thr Val Ser Thr Asp Lys  
                             115                            120                            125  
 Ala Gln Arg His Phe Gly Tyr Glu Pro Leu Phe Ser Trp Glu Asp Ser  
                             130                            135                            140  
 Arg Thr Arg Thr Ile Leu Trp Val Gln Ala Ala Thr Gly Ser Ala Gln  
                             145                            150                            155                            160

<210> 4257  
 <211> 14  
 <212> PRT  
 <213> Homo sapiens

<400> 4257  
 Met Ala Trp Thr Leu Leu Gly Arg Val Val Gly His His Pro  
           1                            5                            10

<210> 4258  
 <211> 1  
 <212> PRT  
 <213> Homo sapiens

<400> 4258  
 Ser  
   1

<210> 4259  
 <211> 36  
 <212> PRT  
 <213> Homo sapiens

<400> 4259  
 Met Leu Ile Val Tyr Leu Lys Phe Gln Phe Asn Cys Ala Ser Val Phe  
           1                            5                            10                            15  
 Cys Leu Gly Ile Leu Leu Trp Gly Thr Ser Arg Ser Leu Ala Ser Ser  
                             20                            25                            30  
 Trp Ser Met Ser  
                             35

<210> 4260  
 <211> 12



<212> PRT  
<213> Homo sapiens

<400> 4260  
Met Ile Leu Ala Leu Ile Lys Met Met Thr Phe Ala  
1 5 10

<210> 4261  
<211> 41  
<212> PRT  
<213> Homo sapiens

<400> 4261  
Met His Leu Cys Trp Ala Gly Ala Leu Ser Phe Val Phe Trp Ala Asn  
1 5 10 15  
Leu Ile Leu Ile Tyr Leu Phe Gly Thr Ser Glu Ser Pro Gln Asn Ile  
20 25 30  
Leu Ser Ser Tyr Phe Glu Leu Gly Val  
35 40

<210> 4262  
<211> 31  
<212> PRT  
<213> Homo sapiens

<400> 4262  
Met Lys Ala Ile Leu Cys Phe Leu Leu Leu Leu Met Asn Pro Phe Pro  
1 5 10 15  
Pro Phe Ser Phe Pro Ser Pro Ile Asp Gln Lys Cys Glu Gly Gly  
20 25 30

<210> 4263  
<211> 187  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (140)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (141)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (152)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>



<221> SITE  
 <222> (175)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (178)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4263  
 Met His Pro Leu Pro Arg Ala Trp Gly Leu Val Val Gly Ser Leu Ala  
 1 5 10 15  
 Phe Thr Gln Gly Ala Cys Leu Ser His Gly Gly Gln Pro Lys Val Gly  
 20 25 30  
 Arg Ser Pro Leu Gly Asp Trp Asp Lys Met Pro Ser Phe Gln Arg Asn  
 35 40 45  
 Val Glu Ala Ser Arg Lys Lys Lys Ala Val Arg Pro Glu Glu Ser Gly  
 50 55 60  
 Val Leu His Gln Arg Pro Val Pro Ser Gly Gln Pro Leu Arg Trp Ala  
 65 70 75 80  
 Leu Gly Gly Cys Gly Val Pro Gly Phe His Gln Gly Cys Val Cys Leu  
 85 90 95  
 Pro Arg Gly Ala Ser Lys Arg Gly Lys Lys Ser Thr Gly Gly Trp Gly  
 100 105 110  
 Gln Asp Val Arg Leu Ser Gly Gly His Cys Gly Ser Pro Arg Lys Lys  
 115 120 125  
 Val Thr Arg Leu Lys Arg Lys Leu Gly Ser Ser Xaa Xaa Gly Gln Cys  
 130 135 140  
 Leu Pro Gly Ser Leu Cys Ala Xaa Ser Arg Gly Ala Arg Thr Gln Phe  
 145 150 155 160  
 Ala Leu Lys Gly Ala Asp Tyr Asn Leu Ile Gly Arg Arg Phe Xaa Asn  
 165 170 175  
 Val Xaa Thr Trp Lys Asn Pro Trp Gly Tyr Pro  
 180 185

<210> 4264  
 <211> 85  
 <212> PRT  
 <213> Homo sapiens

<400> 4264  
 Met Ala Ser Tyr Cys Gly Trp Ile Lys Thr Lys Thr Leu Ala Trp Leu  
 1 5 10 15  
 Ile Arg Ser Ala Gly Phe Gly Ser Ala Asn Leu Ser Ser Leu Leu Ala  
 20 25 30  
 Leu Ser Ile Ser Leu Leu Phe Pro Ser Phe Val Thr Gln Val Ser Phe



35

40

45

Leu Lys Met His His Gly Leu Phe Pro Pro Pro Gly Thr Phe Phe Pro  
 50 55 60

Pro Phe Pro Leu Thr Cys Gln Phe Leu Leu Ser Phe Ile Ser Leu Leu  
 65 70 75 80

Lys Cys His Cys Phe  
 85

&lt;210&gt; 4265

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 4265

Met Ile Arg Gln Gln Tyr Asn Xaa His Phe Met Ser Val Ala Val Ser  
 1 5 10 15

Thr Phe Ser

&lt;210&gt; 4266

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4266

Met Phe Ser Leu Ser Leu Ile Leu Tyr Phe Val Ser Gln Ile Phe Pro  
 1 5 10 15

Gln Phe Ser Trp Leu Asn His Phe Asn Cys Lys Gly Lys Ile Tyr Ile  
 20 25 30

Ser

&lt;210&gt; 4267

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4267

Met Val Gly Val Met Leu Gly Val Cys Ser Val Met Gly Leu Pro Trp  
 1 5 10 15

Phe Val Ala Ala Thr Val Leu Ser Ile Ser His Val Asn Ser Leu Lys  
 20 25 30



2026

Val Glu Ser Glu Cys Ser Ala Pro Gly Glu Gln Pro Lys Phe Leu Gly  
35 40 45  
Ile Arg Glu Gln Arg Val Thr Gly Leu Met Ile Phe Ile Leu Met Gly  
50 55 60  
Leu Ser Val Phe Met Thr Ser Val Leu Lys Val Lys Phe Leu Tyr Cys  
65 70 75 80  
Arg Val Leu Gln Ser Tyr Tyr Asn Ile Tyr Thr  
85 90

<210> 4268  
<211> 148  
<212> PRT  
<213> Homo sapiens

<400> 4268  
Met Ala Ser Val Val Leu Ala Leu Arg Thr Arg Thr Ala Val Thr Ser  
1 5 10 15  
Leu Leu Ser Pro Thr Pro Ala Thr Ala Leu Ala Val Arg Tyr Ala Ser  
20 25 30  
Lys Lys Ser Gly Gly Ser Ser Lys Asn Leu Gly Gly Lys Ser Ser Gly  
35 40 45  
Arg Arg Gln Gly Ile Lys Lys Met Glu Gly His Tyr Val His Ala Gly  
50 55 60  
Asn Ile Ile Ala Thr Gln Arg His Phe Arg Trp His Pro Gly Ala His  
65 70 75 80  
Val Gly Val Gly Lys Asn Lys Cys Leu Tyr Ala Leu Glu Glu Gly Ile  
85 90 95  
Val Arg Tyr Thr Lys Glu Val Tyr Val Pro His Pro Arg Asn Thr Glu  
100 105 110  
Ala Val Asp Leu Ile Thr Arg Leu Pro Lys Gly Ala Val Leu Tyr Lys  
115 120 125  
Thr Phe Val His Val Val Pro Ala Lys Pro Glu Gly Thr Phe Lys Leu  
130 135 140  
Val Ala Met Leu  
145

<210> 4269  
<211> 53  
<212> PRT  
<213> Homo sapiens

<400> 4269  
Met Pro Ala Arg Gln Cys His Val Tyr Thr Cys Met Cys Val Cys Thr  
1 5 10 15



Trp Val Cys Val Pro Val Cys Val Cys Gly Ile Leu Val Thr Phe Ala  
 20 25 30

Ile Phe Ser Trp Leu Glu Val Arg Gly Pro Ser His Thr Gln Arg Gln  
 35 40 45

Glu Leu Met Gln Val  
 50

<210> 4270  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens

<400> 4270  
 Met Cys Leu Leu Asn Gly Cys Val Cys Lys Ile Lys Met Leu Thr Val  
 1 5 10 15

Ala Thr Leu Leu Leu Ser Leu Pro Leu Gly Leu Leu  
 20 25

<210> 4271  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 4271  
 Met Thr Ile Pro Lys Asp Ser Leu Ile Leu Phe Arg Leu Leu Ala Phe  
 1 5 10 15

Ile Val Tyr Val Leu Trp Phe Ser Thr Asn Ile His Tyr Pro Gln  
 20 25 30

<210> 4272  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<400> 4272  
 Met Leu Cys Phe Leu Ile Trp Arg Leu Val Met Trp Val Cys Ser Thr  
 1 5 10 15

Cys Lys Lys Met His Arg Ala Gln Asp Lys Cys Ala Phe Pro  
 20 25 30

<210> 4273  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 4273  
 Met Lys Pro Arg Val Ile Ser Thr Thr Ile Phe Phe Leu Leu Leu Phe  
 1 5 10 15



Lys Ser Val Cys Gln Ser Phe Lys Phe Phe Leu Ser Asp Cys Cys His  
 20 25 30

<210> 4274  
 <211> 36  
 <212> PRT  
 <213> Homo sapiens

<400> 4274  
 Met Leu Leu Met Ala Leu Leu Val Thr Leu Leu Thr Ser Ile Gln Val  
 1 5 10 15  
 Gly Leu Pro Asp Ala Ile Leu Ser His Pro Glu Ile Thr Ala Val Tyr  
 20 25 30  
 Ile Asp Leu Val  
 35

<210> 4275  
 <211> 34  
 <212> PRT  
 <213> Homo sapiens

<400> 4275  
 Met Arg Glu Gly Gln Leu Lys Ala Lys Arg Lys Pro Cys Met Gly Arg  
 1 5 10 15  
 Leu Cys Phe Trp Ser Tyr Phe Phe Phe Phe Phe Phe Thr Ile His  
 20 25 30  
 Gly Ile

<210> 4276  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<400> 4276  
 Met Leu Phe Pro Leu Phe Phe Ile Leu Ser Ile Phe Ser Val His Ile  
 1 5 10 15  
 Val Asn Ser Thr Leu Glu Met Glu Lys Gln Ser Gln Arg Val  
 20 25 30

<210> 4277  
 <211> 62  
 <212> PRT  
 <213> Homo sapiens



[illegible]

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<210> 4278
<211> 37
<212> PRT
<213> Homo sapiens
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<210> 4279
<211> 55
<212> PRT
<213> Homo sapiens
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<210> 4280
<211> 27
<212> PRT
<213> Homo sapiens
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2029



Tyr Leu Ile Pro Pro Glu Phe Gly Asp Tyr Leu  
 20 25

<210> 4281  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 4281  
 Met Glu Ile Ile His Tyr Ala Ala Leu Ala Gly Ile Thr Leu Leu Thr  
 1 5 10 15  
 Leu Leu Phe Ala Ile Gly Ile Tyr Thr Val Leu Pro Pro Gly Trp Asn  
 20 25 30  
 Phe Arg Gln Lys Lys Leu Asn Ile Arg Asn Leu Leu Pro His Asn Pro  
 35 40 45  
 Pro His Ser Trp Tyr Asn Ser His His Gln Gln Ile Val Ala Pro Pro  
 50 55 60  
 Lys Cys Pro Val Phe Ala His Pro Gly Ile Ser His Ser Ser Phe Thr  
 65 70 75 80  
 Ala Ser Gln Lys Thr Phe His Gly Pro Thr Gln Asn Ile Pro Pro Ser  
 85 90 95  
 Gln His Ser Leu Ile Gly Ser Pro Ile Leu Tyr Phe Lys Gly Ile Tyr  
 100 105 110  
 Arg Asn Ser Leu Gln Met Lys Pro Asn Ser Leu Pro Leu His Leu Leu  
 115 120 125  
 Ser Val Tyr Leu  
 130

<210> 4282  
 <211> 51  
 <212> PRT  
 <213> Homo sapiens

<400> 4282  
 Ile Ile Ser Leu Thr Pro Leu Trp Cys Leu Pro Ser Ala Ile Ala Cys  
 1 5 10 15  
 Ser His Ile Leu Ser Phe Gly Phe Pro Pro Glu Ile Pro Asn Phe Pro  
 20 25 30  
 Thr Arg Ser Tyr Lys Ala Ile Gln Phe Ser Ser Ala Ser Ile Arg Lys  
 35 40 45  
 Leu Ser Phe  
 50



<210> 4283  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 4283  
 Met Leu Met Pro Trp Gly Leu Gly Leu Gly Ile Trp Leu Cys Ser Leu  
 1 5 10 15

Thr

<210> 4284  
 <211> 54  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (31)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (40)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (48)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4284  
 Met Cys Ala Arg Lys Cys Arg Met Leu Leu Val Leu Gln Thr Val Val  
 1 5 10 15

Cys Gly Thr Pro Lys Pro Leu Ser Phe His Asp Ala Phe Cys Xaa Val  
 20 25 30

Ile Thr Phe Pro Trp Arg Arg Xaa Gln Pro Trp Trp Arg Ala Leu Xaa  
 35 40 45

Trp Leu Cys Pro Ser Ala  
 50

<210> 4285  
 <211> 34  
 <212> PRT  
 <213> Homo sapiens

<400> 4285  
 Met Ile Val Ile Asn Lys Ile Lys Thr Ile Tyr Leu Phe Leu Val Met  
 1 5 10 15

Leu Gln Phe Thr Arg Lys Ile Gln Lys Ile Leu Lys Lys Lys Ile Cys  
 20 25 30



Trp Asn

<210> 4286  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 4286  
Met Leu Met Asn Gln Val Leu Thr Ala Pro Ile Gly Leu Val Leu Leu  
1 5 10 15  
Leu Leu Phe Ala Leu Leu Thr Phe Pro Pro Ser Ser Ser Ile Arg Glu  
20 25 30

Arg Asn

<210> 4287  
<211> 27  
<212> PRT  
<213> Homo sapiens

<400> 4287  
Met Thr Ser Tyr Cys Pro Ala Gly Ser Val Pro Arg Leu Ser Leu Pro  
1 5 10 15  
Ser Thr Val Arg Pro Leu Leu Gly Trp Leu Tyr  
20 25

<210> 4288  
<211> 41  
<212> PRT  
<213> Homo sapiens

<400> 4288  
Met His Trp Gln Ile Gln Leu Ile Asn Trp Ser Ser Phe Leu Ser Leu  
1 5 10 15  
Phe Ser Phe Leu Gln Ile Ser Ala Gln Ser Pro Lys Tyr Cys Leu Ser  
20 25 30  
Gly Pro Ile Met Cys Pro Cys Ile Leu  
35 40

<210> 4289  
<211> 1  
<212> PRT  
<213> Homo sapiens

<400> 4289  
Met  
1



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00  
00  
00  
00  
00  
00  
00  
00  
00

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<400> 4291
Met Leu Phe Gly Ser Leu Cys Asp Leu His Ser Ala Phe Phe Leu Ile
  1                      5                      10                      15
Ser Ser Thr Ala Cys Pro Thr Leu Ser Phe Leu His Ser Thr Pro Asp
                20                      25                      30
Val Phe Gln Asn Leu .
      35
```

<400> 4292  
Trp Leu Leu Lys Thr  
1 5

<400> 4293  
Met Ile Leu Phe Thr Met Phe Ile Leu Ala Gly Trp  
1 5 10

<220>  
<221> SITE  
<222> (2)



<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4294

Met Xaa His Gly Leu Leu Leu Ile Ser Leu Gln Leu Leu Gly Pro Ile  
1 5 10 15

Ile Thr Tyr Thr Thr Ile Ser Asp Pro Thr Thr Phe Leu Leu  
20 25 30

<210> 4295

<211> 36

<212> PRT

<213> Homo sapiens

<400> 4295

Leu Pro Ser Leu Leu Leu Phe Leu Asn Pro Phe Ile Phe Thr Ile Leu  
1 5 10 15

Leu Leu Phe Pro Cys Gly Gly Phe Asn Thr Ser Ile Phe Phe Leu Asn  
20 25 30

Gln Leu Asp Ser  
35

<210> 4296

<211> 4

<212> PRT

<213> Homo sapiens

<400> 4296

Met Leu Pro Leu  
1

<210> 4297

<211> 37

<212> PRT

<213> Homo sapiens

<400> 4297

Met Gly Leu Leu Val Pro Leu Thr Leu Leu Leu Gln Leu Ser Ala Gly  
1 5 10 15

Glu Leu Ser Val Val Leu Gln Asp Ser Thr Asp Cys Met Ser Glu Leu  
20 25 30

Gly Leu Ala Trp Leu  
35

<210> 4298

<211> 44

<212> PRT

<213> Homo sapiens



[illegible]

1



<210> 4301  
 <211> 47  
 <212> PRT  
 <213> Homo sapiens

<400> 4301  
 Met Pro Gly Leu Ala Val Thr Ser Pro Thr Trp Val Val Arg Phe Thr  
   1                  5                  10                  15  
 Asn Asn Pro Val Thr Ala Ala Ser Arg Met Asp His Ala Ala Trp Leu  
                   20                  25                  30  
 Val Leu Ile Ser Gly Ser Ser Leu Glu Leu Arg Leu Arg Ser Ala  
           35                  40                  45

<210> 4302  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 4302  
 Met Ser Leu Arg Pro Val Thr Gln Thr Thr Phe Gly Asp Cys Gly Ser  
   1                  5                  10                  15  
 Val Ser Ser His Arg Gly Lys Lys Pro Met Asn Lys Gln Ala Gln Pro  
                   20                  25                  30  
 Leu Pro Pro Arg Ser Asp Asp Phe Met Pro Gln Thr Ala Asn Pro His  
           35                  40                  45  
 Leu Pro Thr Asp Ala Ser Val Thr Ala Gly Glu Lys Pro Arg Asn Arg  
           50                  55                  60  
 Gly Pro Asp Val Glu Thr Glu Pro Phe Arg Ala  
   65                  70                  75

<210> 4303  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 4303  
 Gly Ile Thr Phe Phe Phe Ile Tyr Phe Gly Phe Cys Phe Ser His Glu  
   1                  5                  10                  15  
 Gly Leu Phe Ser Asn Ile  
           20

<210> 4304  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 4304  
 Leu Leu Val Asp Phe Asp Ser Asp Lys Arg Thr Gln Pro Ile Trp Val







Met Phe Ile Ala Leu Cys Ser Lys Val Cys Val Cys Val Asn Ala Tyr  
 1 5 10 15

Val Cys Val His Thr Tyr Val Val Phe Met Pro Gly Met Tyr Thr Ile  
 20 25 30

Trp Val His Ile Cys Asn  
 35

<210> 4309  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 4309  
 Met Arg Ser Leu Gly Leu Arg Cys Ala Phe Tyr Leu Leu Cys Leu Leu  
 1 5 10 15

Asn Pro Ser Ala Leu Pro Asp Pro Ala Gly Arg Ser Pro Pro Leu  
 20 25 30

<210> 4310  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<400> 4310  
 Met Leu Ala Gly Tyr Phe Ala Asp Leu Phe Met Trp Leu Pro His Ser  
 1 5 10 15

Val Thr Cys Leu Cys Thr Ser Val Cys Phe Cys Cys Gly Trp  
 20 25 30

<210> 4311  
 <211> 14  
 <212> PRT  
 <213> Homo sapiens

<400> 4311  
 Met Val Ile Arg Leu Ser Asn Trp Ala Pro Thr Cys Val Ser  
 1 5 10

<210> 4312  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 4312  
 Met Ala Pro Leu Pro Ser Ser Leu Leu Leu Leu Thr Ile Tyr His  
 1 5 10 15

Gly Ser Ser His Leu Pro Ser Thr Met Ile Val Ser Phe Leu Arg Pro  
 20 25 30



His Gln Glu Gln Val Pro Ala Pro Cys Phe Leu His Ser Cys Ser Leu  
           35                          40                          45  
 Leu Phe Phe Arg Met Ala Thr Ala Asn Ile Val Gln Met Ser Lys Leu  
       50                          55                          60  
 Pro Thr Pro Leu Cys Ala Pro Pro Thr Leu Asn Leu Leu Thr Leu Cys  
       65                          70                          75                          80  
 Ser Arg Cys Lys Leu Thr Cys Pro Phe Cys His Arg Gly Cys Leu Ser  
                           85                          90                          95  
 Pro Pro Ser Ala Val Thr Leu Leu  
                           100

<210> 4313  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 4313  
 Gln Ala Gln Leu Ile Phe Ser Trp Gly  
   1                          5

<210> 4314  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<400> 4314  
 Met Gly Val Leu Ala Val Leu Leu Pro Val Thr Gly Thr Trp Ala Trp  
   1                          5                          10                          15  
 Val Arg Gly Gly His Val Ala Pro Asp Thr Ala Leu Arg Ile  
                           20                          25                          30

<210> 4315  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

<400> 4315  
 Met Lys Val Lys Leu Pro Phe Val Ser Val Ser Leu Cys Val Cys Asp  
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 Cys Val Arg Gly Ser Thr Leu Thr Trp Asn Arg Leu Leu Arg Val Gly  
                           20                          25                          30  
 Glu Gly Ser Gly Arg Tyr Ser Tyr Leu Tyr Arg Arg Lys Ala Gly Trp  
                           35                          40                          45  
 Gly Cys Gly His Thr Pro Ile Glu Lys Val Val  
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<210> 4316  
<211> 32  
<212> PRT  
<213> Homo sapiens

<400> 4316  
Met Gly Ala Gly Ala Phe Gly Tyr Leu Ala Leu Pro Cys Leu Val Cys  
1 5 10 15  
Leu Thr Tyr Leu Leu Pro Thr Leu Ser Arg Asn His Ser Gln Met Gly  
20 25 30

<210> 4317  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 4317  
Met Ala Leu Glu Ala Gly Ala Leu Tyr Ile Gly Trp Ile Leu Gly Gln  
1 5 10 15  
Ala Phe Phe Phe Phe Phe Phe Ser Glu Val Ser Leu Pro Lys Cys Gly  
20 25 30  
Lys Val

<210> 4318  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 4318  
Met His Arg Ser Leu Ser Pro Cys Lys Ile Trp Leu Leu Phe Phe  
1 5 10 15

<210> 4319  
<211> 33  
<212> PRT  
<213> Homo sapiens

<400> 4319  
Met Ser Leu Pro His Leu Leu Phe Ser Ala Phe Met Ser Gln Ala Ala  
1 5 10 15  
Trp Gly Leu Leu Phe Leu Gly Leu Leu His Ser Thr Asn Leu Arg Trp  
20 25 30  
Ala



<210> 4320  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 4320  
 Met Trp Ser Leu Leu His Phe Cys Leu Leu Leu Ala Ser Phe Leu Ser  
     1                    5                    10                    15  
 Cys Phe Glu Leu Leu Ala Ser Val Cys Ser Leu Gly Arg Arg Phe Glu  
                     20                    25                    30  
 Glu Tyr Ser Trp Phe Phe Pro Gly Ser Arg Gly Ser Gly Cys Ala Gly  
                     35                    40                    45  
 Val Ser  
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<210> 4321  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 4321  
 Met Ala Ser Leu Leu Met Phe Leu Val Pro Leu Asn Arg Ile Gly Arg  
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 Ile Pro His Leu Cys Arg  
                     20

<210> 4322  
 <211> 1  
 <212> PRT  
 <213> Homo sapiens

<400> 4322  
 Met  
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<210> 4323  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 4323  
 Ser Trp Cys Asp Gly Gly Cys Trp Cys Arg Leu Met Tyr Ser Phe Val  
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<212> PRT
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<210> 4327
<211> 34
<212> PRT
<213> Homo sapiens
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2042



Arg Ser Leu Val Leu Val Leu Ile Gln Gly Leu Ser Pro Val Leu Ser  
 20 25 30

Arg Val

<210> 4328  
 <211> 39  
 <212> PRT  
 <213> Homo sapiens

<400> 4328  
 Met Phe Ile Leu Leu Ile Met Tyr Leu Ile Trp Glu Gly Lys Ala Val  
 1 5 10 15  
 Ser Cys Tyr Leu Leu Pro Pro Ile Lys Ala Ser Val Ala Thr Val Leu  
 20 25 30  
 Thr Phe Asn Pro Trp Lys Phe  
 35

<210> 4329  
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 <212> PRT  
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<400> 4329  
 Met Asn Arg Arg Val Cys Val Leu Met Leu Leu Val Ala Trp Ile Gly  
 1 5 10 15  
 Gly Phe Leu His Ser Leu Val Gln Phe Leu Phe Ile Tyr Gln Leu Pro  
 20 25 30  
 Phe Cys Gly Pro Asn Val Ile Asp Asn Phe Leu Cys Asp Leu Tyr Pro  
 35 40 45  
 Leu Leu Lys Leu Ala Cys Thr Asn Thr Tyr Val Thr Gly Leu Ser Met  
 50 55 60  
 Ile Ala Asn Gly Gly Ala Ile Cys Thr Val Thr Phe Phe Pro Leu Leu  
 65 70 75 80  
 Leu Ser Tyr Gly Val Ile Leu Pro Ser Leu Lys Thr Gln Ser Leu Glu  
 85 90 95  
 Gly Lys Cys Lys Ala Phe Tyr Thr Cys Ala Ser His Ile Thr Val Ile  
 100 105 110  
 Thr Leu Phe Phe Val Pro Cys Ile Phe Leu Phe Ala Arg Pro Asn Ser  
 115 120 125  
 Thr Phe Pro Ile Asp Lys Ser Met Thr Val Val Leu Thr Cys Ile Thr  
 130 135 140  
 Pro Met Leu Lys Pro Leu Ile Tyr Ala Leu Arg Asn Ala Glu Met Lys  
 145 150 155 160



Ser Ala Met Arg Lys Leu Trp Ser Glu Lys Val Ser Leu Ala Gly Lys  
165 170 175

Gly Leu Tyr Pro Ser  
180

<210> 4330  
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<212> PRT  
<213> Homo sapiens

<400> 4330  
Met Gly Trp Gly Leu Leu Cys Thr Phe Leu Tyr Leu Ala Pro Gln Lys  
1 5 10 15  
Thr Glu Gly Ala Ala Ala Asp Leu Ala Ser Thr Ser Pro Ala Pro  
20 25 30

<210> 4331  
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<212> PRT  
<213> Homo sapiens

<400> 4331  
Met Leu Asn Leu Cys Ile Thr Leu Leu Phe Leu Ser Val Thr Leu Thr  
1 5 10 15  
Asn Ile His Ser Asn His Ser Ser Tyr Ser Asn Tyr Leu Leu  
20 25 30

<210> 4332  
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<212> PRT  
<213> Homo sapiens

<400> 4332  
Met His Pro Leu Leu Phe Tyr Leu Val Lys Leu Phe Leu Glu Ala Arg  
1 5 10 15  
Asp Thr Thr Cys Ile Ile Met Ser Cys Pro Thr Pro Gly Ile Gln Glu  
20 25 30

Ala Leu Lys Ile Thr Cys Ser  
35

<210> 4333  
<211> 26  
<212> PRT  
<213> Homo sapiens

<400> 4333  
Met Ala Thr Met Phe Thr Lys Ile Thr Thr Ser Ile Val Phe Gly Leu  
1 5 10 15



Ser Leu Ala Leu Pro Ile Ser Thr Arg Ala  
 20 25

<210> 4334  
 <211> 78  
 <212> PRT  
 <213> Homo sapiens

<400> 4334  
 Met Asp Ser Asp Phe Pro Thr Thr Lys Ile Met Met Leu Leu Ala Ser  
 1 5 10 15  
 Ile Pro Ala Leu Leu Gln Gly Val Val Asn Ile Leu Tyr Arg His Arg  
 20 25 30  
 Leu Gly Leu Ser Asn Phe Leu Pro Gln Cys Ser Leu Asn Ser Leu Lys  
 35 40 45  
 Gly Ser Asn Val Gly Pro Asn Leu His Thr Glu Lys Leu Arg Gln Lys  
 50 55 60  
 Lys Ser Lys Gln Phe Val Pro Cys His Gln Ile Thr Tyr Lys  
 65 70 75

<210> 4335  
 <211> 6  
 <212> PRT  
 <213> Homo sapiens

<400> 4335  
 Met Phe Ile Phe Phe Phe  
 1 5

<210> 4336  
 <211> 39  
 <212> PRT  
 <213> Homo sapiens

<400> 4336  
 Met Lys Ser Leu Leu Leu Ala Ile Ala Phe Gln Lys Leu Leu Gly Ser  
 1 5 10 15  
 Pro His Pro Ile Leu Gln Pro His Leu Phe Ala Ser Leu His Pro Ser  
 20 25 30  
 Pro Leu Ile Val Gln Gly Ser  
 35

<210> 4337  
 <211> 32  
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<220>  
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 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 4337  
 Pro Pro Pro Ala Val Xaa Ser Leu Pro Pro Leu Leu Leu Pro Ser Leu  
   1                  5                  10                  15  
 Leu Pro Pro Gln Gly Ser Gly Ala Ala Ser Pro Ser Pro Thr Pro Trp  
                   20                  25                  30

<210> 4338  
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 <213> Homo sapiens  
  
 <400> 4338  
 Met Ser Pro Asn Cys His Leu Leu Glu Thr Arg Pro Ser Ala Ser Leu  
   1                  5                  10                  15  
 Leu Leu Leu Gly Ile Pro Leu Leu Arg Gly Ala Ser  
                   20                  25

<210> 4339  
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 <212> PRT  
 <213> Homo sapiens  
  
 <400> 4339  
 Met Leu Asn Val Phe Ala Val Pro Val Tyr Val Leu Leu Ile Ile Phe  
   1                  5                  10                  15  
 Trp Glu Arg Arg Ala Lys Lys Tyr Thr Ala Glu Asn Arg Gln Phe Met  
                   20                  25                  30  
  
 Leu

<210> 4340  
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 <212> PRT  
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 <400> 4340  
 Met Asn Leu Lys Ile Leu Thr Cys Phe Leu Val Ser Tyr Thr Phe Pro  
   1                  5                  10                  15  
 Ser Ser Arg Ser Ala Glu Pro Ile Met Leu Lys Ile Ile Ile Ile Lys  
                   20                  25                  30



Lys Ser Gly Trp Arg Ser  
35

<210> 4341  
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<400> 4341  
Met Ser Glu Ala Gly Trp Trp Ala Trp Leu Phe Val Ile Leu His Pro  
1 5 10 15  
Phe Gly Met Pro Asp Thr Phe His Asn Asn Phe Lys Lys Asp Lys Thr  
20 25 30  
Thr Ala Glu Lys Cys Ile Glu  
35

<210> 4342  
<211> 62  
<212> PRT  
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<400> 4342  
Met Phe Leu Gln Val Ser Tyr Leu Trp Thr Asp Val Ser Ala Gly Gln  
1 5 10 15  
Leu Leu Met Trp Leu Cys Arg Trp Pro Thr Thr Val Ala Gly Tyr Phe  
20 25 30  
Ser Gln Gly Thr Cys Leu Leu Glu Met Tyr Pro Leu Ser Ser Pro Phe  
35 40 45  
Ser Ser Phe Cys Gln Arg Ile Ala Gly Val Val Glu Glu Ser  
50 55 60

<210> 4343  
<211> 33  
<212> PRT  
<213> Homo sapiens

<400> 4343  
Met Thr Ala Tyr Leu Leu Val Leu Gln Ala Leu Thr Arg Leu Thr Ala  
1 5 10 15  
Gln Thr His His Thr Gly Glu His Glu Arg Val Asn Glu Ser Phe Ile  
20 25 30  
Ile

<210> 4344  
<211> 29



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<212> PRT  
<213> Homo sapiens

<400> 4344  
Met Pro Arg Pro Gly Ser His Leu Ser Trp Trp Arg Leu Trp Leu Ala  
1 5 10 15  
Pro Arg Pro Pro Ala Leu Leu Leu Arg Asp Ser Arg Thr  
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<210> 4345  
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<212> PRT  
<213> Homo sapiens

<400> 4345  
Met Val Ile Ile Ile Val Phe Asn Gln  
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<210> 4346  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 4346  
Met Cys Cys Tyr Glu Ala Leu Ala Ser Trp Val Met His Phe Leu Val  
1 5 10 15  
Phe Ala Leu Pro Arg Ser Leu Ser His Val Ser Phe Ser Leu Gly Phe  
20 25 30  
Tyr Pro Thr Leu Lys  
35

<210> 4347  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 4347  
Met Leu Ile Phe Tyr Ile Leu Leu Cys Met Val Lys Gly  
1 5 10

<210> 4348  
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<212> PRT  
<213> Homo sapiens

<400> 4348  
Leu Phe Cys Pro Leu Leu Val Ile Phe Gln Asn Phe Cys Ser Gly Asp  
1 5 10 15

Asn



[illegible]

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<400> 4350  
Met Gln Leu Ser Ser Ala Val Ile Ala Phe Ser Cys Cys Pro Val Phe  
1 5 10 15

Met Trp Ser Leu Val Asn Ser Thr Arg Ile Leu Ser Leu Leu Ala Lys  
20 25 30

Val Leu Pro Xaa Ala Glu Arg Glu Ser Pro Ser Lys Leu Thr Ser Val  
35 40 45

Thr Pro Pro Ser Leu Thr Pro His Leu Xaa Arg Ala Thr Asn Xaa Leu  
50 55 60

Phe Asp  
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Met Ser Gly Ser Gln Val Val Ala Leu Phe Leu Leu Cys Val Arg Ile
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His Ser Ser Ser Arg Arg Gln Asn Leu Asn Ser Asn Leu Ser Gln  
 50 55 60

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 <211> 36  
 <212> PRT  
 <213> Homo sapiens

<400> 4355  
 Met Leu Ser Cys Leu Arg His Trp Thr Trp Asn Leu Leu Val Leu Arg  
 1 5 10 15  
 Pro Leu Ala Ser Met Val Thr Pro Ala Pro His Leu Val Arg Arg Pro  
 20 25 30  
 Ser Val Ser Asp  
 35

<210> 4356  
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 <212> PRT  
 <213> Homo sapiens  
 <400> 4356  
 Met Arg Glu Asn Phe Thr Ala Lys Val Trp Leu Ala Ile Pro Phe Leu  
 1 5 10 15  
 Ala Leu Gly Phe Leu Cys Val Ser Glu Pro Arg Tyr Thr Asp Phe Arg  
 20 25 30  
 Ser Lys Glu Ser Ser Ser Leu Pro Leu Gly Lys Thr Gly Arg Gly Met  
 35 40 45  
 Val Leu Tyr Gln Ser His Thr  
 50 55

<210> 4357  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens  
 <400> 4357  
 Met Arg Val Trp Arg Leu Ala Trp Phe Ala Trp Ala Trp Val Gly His  
 1 5 10 15  
 Gly Thr Ser Cys Thr Gly Val Gln Ser Thr Leu His Ile Val Thr Pro  
 20 25 30  
 Ser

<210> 4358  
 <211> 46



<212> PRT  
<213> Homo sapiens

<400> 4358

Met Lys Ile Ser Phe Thr Phe Phe Ile Leu Leu Lys Asn Val Leu  
1 5 10 15

Ala Ala Arg Lys Phe Lys Met Ile Asp Val Ala His Ile Met Phe Leu  
20 25 30

Cys Asp Arg Leu Leu Trp Ile Lys Ser Arg Gln Thr Met Ala  
35 40 45

<210> 4359

<211> 31

<212> PRT

<213> Homo sapiens

<400> 4359

Met Arg Leu Arg Asp Arg Arg Ala Gly Glu Gly Gln Arg Gln Leu Leu  
1 5 10 15

Leu Leu Arg Leu Leu Leu Arg Thr Ser Phe Trp Gly Val Val Phe  
20 25 30

<210> 4360

<211> 66

<212> PRT

<213> Homo sapiens

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Met Leu Gly Val Ser Ala Ser Gly Ser Leu Gln Leu Leu Gln Ser Gln  
1 5 10 15

Arg Gly Leu Glu Arg Gly Pro Ala Pro Arg Gln Pro Ala Asp Thr Ser  
20 25 30

Ser Ser Met Cys Glu Ser Leu Val Phe Thr Pro Thr Ala Pro Phe Ser  
35 40 45

Gly Gly His Cys Pro Lys Ala Arg His Gly Arg Leu Thr Ser Pro Phe  
50 55 60

Tyr Gly  
65

<210> 4361

<211> 47

<212> PRT

<213> Homo sapiens

<400> 4361

Met Cys Gly Arg Gln Pro Met Arg Leu Trp Val Ser Phe Ala Val His  
1 5 10 15



Cys Thr Arg Pro Val Lys Ala Ala Pro Arg Asn Pro Thr Leu Leu Leu  
 20 25 30

Cys Arg Leu Pro Trp Pro Glu Ser Cys His Pro Thr Cys Arg Gln  
 35 40 45

<210> 4362  
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 <212> PRT  
 <213> Homo sapiens

<400> 4362  
 Met Thr Trp Pro Phe Phe Tyr Ser Thr Phe Arg Val Trp Ala Leu Ala  
 1 5 10 15

Pro Ser Val Ser Ala Leu Leu Thr Gln Cys Val Lys Met Lys Thr Glu  
 20 25 30

Pro Ser Phe Pro Ser Ser Ser Val Pro Gln Thr Phe Ser Pro Thr Gln  
 35 40 45

Leu

<210> 4363  
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<400> 4363  
 Met Gly Ser Ala Tyr Ala Ile Ile Thr Ala Leu Leu Thr Lys Phe Thr  
 1 5 10 15

Lys Leu Cys Glu Phe Pro Met Leu Glu Thr Gly Leu Phe Phe Leu Leu  
 20 25 30

Ser Trp Ser Ala Phe Leu Ser Ala Glu Ala Ala Gly Leu Thr Gly Ile  
 35 40 45

Val Ala Val Leu Phe Cys Gly Val Thr Gln Ala His Tyr Thr Tyr Asn  
 50 55 60

Asn Leu Ser Ser Asp Ser Lys Ile Arg Thr Lys Gln Leu Phe Glu Phe  
 65 70 75 80

Met Asn Phe Leu Ala Glu Asn Val Ile Phe Cys Tyr Met Gly Leu Ala  
 85 90 95

Leu Phe Thr Phe Gln Asn His Ile Phe Asn Ala Leu Phe Ile Leu Gly  
 100 105 110

Ala Phe Leu Ala Ile Phe Val Ala Arg Ala Cys Asn Ile Tyr Pro Leu  
 115 120 125

Ser Phe Leu Leu Asn Leu Gly Arg Lys Gln Lys Ile Pro Trp Asn Phe  
 130 135 140







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Met Ser Ile Ser Arg Leu Lys Ile Ala Lys Arg Phe Leu Gln Asp Ile  
1 5 10 15

Met Gly Phe His Val Leu Trp Leu Leu Val Glu Phe Thr Gln Trp Arg  
35 40 45

Thr Leu Ala Arg Gly Arg Lys Arg Gly Gly Ser Ser Leu Thr Gly Leu  
50 55 60

Asn Phe Thr Phe Cys Ser Pro Trp Met Arg Ala Val Ile Ile Thr Ile  
65 70 75 80

Pro Gly Asn Ser Gln Arg Lys Arg Lys Gly Lys Arg Phe Gly Gln Asp  
85 90 95

Ser

<211> 91

<212> PRT

<213> Homo sapiens

Met Gly Thr Trp Ile Glu Met Ser Ser Leu Trp Pro Cys Thr Trp Cys  
1 5 10 15

Thr Glu Pro Trp Arg Arg Ser Pro Cys Pro Pro Pro Cys Pro Arg Pro  
20 25 30

Ser Ser His Pro Pro Arg Glu Arg Arg Leu Cys Ser Leu Ala Pro Ser  
35 40 45

Pro Ser Cys Leu Pro Ala Pro His Gln Lys Thr Ala Ser Ala Pro Arg  
50 55 60

Arg Pro Thr Ala Ala Ser Ala Ala Ser Thr Ala Gln Gly Ala Cys Pro  
65 70 75 80

Pro Ser Thr Ala Ser Ser Lys His Ser Gln Gln  
85 90

<211> 38

<212> PRT

<213> Homo sapiens

<400> 4367











2058-2059

<211> 71  
<212> PRT  
<213> Homo sapiens

<400> 4374  
Met Thr Glu Glu Arg Gly Val Trp Ala Val Leu Leu Leu Arg Ser Leu  
1 5 10 15  
Ala Pro Ser Leu Ser Cys Leu Thr Val Cys Cys Ser Ser Trp Leu Leu  
20 25 30  
Trp Cys Pro Leu Asn Ser Cys Val Thr Cys Pro Gly Leu Ser Leu Ser  
35 40 45  
Leu Leu Arg Gln Gly Ala Ala Gly Cys Phe Leu Thr Cys Thr Gly Met  
50 55 60  
Pro Gln Ser Thr Trp Pro Gly  
65 70

<210> 4375  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 4375  
Met Phe Tyr Leu Met Trp Trp Gln Phe Ile Gln Gly Val Met Phe Ser  
1 5 10 15  
Gln His Leu Asp Thr Gln Gly Asn Phe Leu Phe Trp Gly Asp Ser Ala  
20 25 30  
Pro Ser Gly Trp Arg  
35

<210> 4376  
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<212> PRT  
<213> Homo sapiens

<400> 4376  
Glu Gln Val Glu Glu Ser Leu Gln Asp Glu Asp Asp Asn Asp Val Tyr  
1 5 10 15  
Ile Leu Thr Lys Val Ser Asp Ile Leu His Ser Ile Phe Ser Ser Tyr  
20 25 30  
Lys Glu Lys Val Leu Pro Trp Phe Glu Gln Leu Leu Pro Leu Ile Val  
35 40 45  
Asn Leu Ile Cys Pro His Arg Pro Trp Ala Arg Gln Thr Met Gly Val  
50 55 60  
Met His Leu  
65



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Met His Pro His Phe Phe Cys Leu Lys Ile Phe Thr Lys Val Ile Leu  
1 5 10 15

<210> 4378

<211> 124

<212> PRT

<213> Homo sapiens

Met His Pro Ala Ala Phe Pro Leu Pro Val Val Val Ala Ala Val Leu  
1 5 10 15

Trp Gly Ala Ala Pro Thr Arg Gly Leu Ile Arg Ala Thr Ser Asp His  
20 25 30

Asn Ala Ser Met Asp Phe Ala Asp Leu Pro Ala Leu Phe Gly Ala Thr  
35 40 45

Leu Ser Gln Glu Gly Leu Gln Gly Phe Leu Val Glu Ala His Pro Asp  
50 55 60

Asn Ala Cys Ser Pro Ile Ala Pro Pro Pro Pro Ala Pro Val Asn Gly  
65 70 75 80

Ser Val Phe Ile Ala Leu Leu Arg Arg Phe Asp Cys Asn Phe Asp Leu  
85 90 95

Lys Val Leu Asn Ala Gln Lys Ala Gly Tyr Gly Ala Ala Val Val His  
100 105 110

Asn Val Asn Ser Asn Glu Leu Leu Asn Met Val Leu  
115 120

<210> 4379

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<400> 4379

Phe Thr Thr Gly Asp Phe  
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<210> 4380

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<212> PRT



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&lt;221&gt; SITE

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$\langle 220 \rangle$

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$\langle 222 \rangle$  (30)

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Lys Leu Gly Asp Ser Leu Arg Asp Phe Cys Phe Lys Pro Xaa Val Phe  
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<400> 4382

Val Thr Asn Phe Trp Arg Ser Phe Asn Leu  
35 40

<210> 4383

<211> 34

<212> PRT

<213> Homo sapiens



項目	単位	数値	単位	数値
1. 総人口	人	1,234,567	2. 男性人口	612,345
3. 女性人口	人	622,222	4. 0歳人口	15,678
5. 1歳人口	人	14,567	6. 2歳人口	13,456
7. 3歳人口	人	12,345	8. 4歳人口	11,234
9. 5歳人口	人	10,123	10. 6歳人口	9,012
11. 7歳人口	人	8,901	12. 8歳人口	7,890
13. 9歳人口	人	6,789	14. 10歳人口	5,678
15. 11歳人口	人	4,567	16. 12歳人口	3,456
17. 13歳人口	人	2,345	18. 14歳人口	1,234
19. 15歳人口	人	1,123	20. 16歳人口	1,012
21. 17歳人口	人	901	22. 18歳人口	890
23. 19歳人口	人	789	24. 20歳人口	678
25. 21歳人口	人	567	26. 22歳人口	456
27. 23歳人口	人	345	28. 24歳人口	234
29. 25歳人口	人	123	30. 26歳人口	112
31. 27歳人口	人	101	32. 28歳人口	90
33. 29歳人口	人	89	34. 30歳人口	78
35. 31歳人口	人	67	36. 32歳人口	56
37. 33歳人口	人	45	38. 34歳人口	34
39. 35歳人口	人	23	40. 36歳人口	12
41. 37歳人口	人	11	42. 38歳人口	10
43. 39歳人口	人	9	44. 40歳人口	8
45. 41歳人口	人	7	46. 42歳人口	6
47. 43歳人口	人	5	48. 44歳人口	4
49. 45歳人口	人	3	50. 46歳人口	2
51. 47歳人口	人	1	52. 48歳人口	1
53. 49歳人口	人	1	54. 50歳人口	1
55. 51歳人口	人	1	56. 52歳人口	1
57. 53歳人口	人	1	58. 54歳人口	1
59. 55歳人口	人	1	60. 56歳人口	1
61. 57歳人口	人	1	62. 58歳人口	1
63. 59歳人口	人	1	64. 60歳人口	1
65. 61歳人口	人	1	66. 62歳人口	1
67. 63歳人口	人	1	68. 64歳人口	1
69. 65歳人口	人	1	70. 66歳人口	1
71. 67歳人口	人	1	72. 68歳人口	1
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81. 77歳人口	人	1	82. 78歳人口	1
83. 79歳人口	人	1	84. 80歳人口	1
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93. 89歳人口	人	1	94. 90歳人口	1
95. 91歳人口	人	1	96. 92歳人口	1
97. 93歳人口	人	1	98. 94歳人口	1
99. 95歳人口	人	1	100. 96歳人口	1
101. 97歳人口	人	1	102. 98歳人口	1
103. 99歳人口	人	1	104. 100歳人口	1
105. 101歳人口	人	1	106. 102歳人口	1
107. 103歳人口	人	1	108. 104歳人口	1
109. 105歳人口	人	1	110. 106歳人口	1
111. 107歳人口	人	1	112. 108歳人口	1
113. 109歳人口	人	1	114. 110歳人口	1
115. 111歳人口	人	1	116. 112歳人口	1
117. 113歳人口	人	1	118. 114歳人口	1
119. 115歳人口	人	1	120. 116歳人口	1
121. 117歳人口	人	1	122. 118歳人口	1
123. 119歳人口	人	1	124. 120歳人口	1
125. 121歳人口	人	1	126. 122歳人口	1
127. 123歳人口	人	1	128. 124歳人口	1
129. 125歳人口	人	1	130. 126歳人口	1
131. 127歳人口	人	1	132. 128歳人口	1
133. 129歳人口	人	1	134. 130歳人口	1
135. 131歳人口	人	1	136. 132歳人口	1
137. 133歳人口	人	1	138. 134歳人口	1
139. 135歳人口	人	1	140. 136歳人口	1
141. 137歳人口	人	1	142. 138歳人口	1
143. 139歳人口	人	1	144. 140歳人口	1
145. 141歳人口	人	1	146. 142歳人口	1
147. 143歳人口	人	1	148. 144歳人口	1
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151. 147歳人口	人	1	152. 148歳人口	1
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Val Ile Cys His Ser Ser Pro Leu Leu Phe Val Leu His Phe Leu Leu  
20 25 30

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Met Phe Phe Ser Phe Leu Val Cys Thr Leu Arg Ser Cys Ile Thr Cys  
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Ser Leu Met Leu Pro Phe Tyr Ala Tyr Thr Pro Ser Lys Pro Asn Ser  
35 40 45

Ala Asn His Phe Ser Pro Ile Ser Ile Ile Ser Ser Phe His Glu Tyr  
50 55 60

Asp Lys Asn Lys Ile Val Phe Val Asn Gly Phe Tyr Lys Phe Tyr Ile  
65 70 75 80

Asn Lys Leu Tyr Glu Phe Leu Leu Ile Glu Ser Met  
85 90

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<210> 4385
<211> 3
<212> PRT
<213> Homo sapiens
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<400> 4385  
Met Ser Ile  
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<210> 4386
<211> 13
<212> PRT
<213> Homo sapiens
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<400> 4386  
Met Lys Gln Lys Lys Ile Ile Leu Leu Phe Asn Met Ala  
1 5 10



<210> 4387  
<211> 33  
<212> PRT  
<213> Homo sapiens

<400> 4387  
Cys Val Leu Ser Gln Phe Phe His Phe Pro Ala Cys Phe Leu Met Ser  
1 5 10 15  
Ala Phe Gly Pro Ile Ile Val Ser Gln His His Gln His Val Asp Lys  
20 25 30  
Lys

<210> 4388  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 4388  
Met Glu Ala Ile Phe Thr Phe Thr Val Leu Asn Gly Lys Ile  
1 5 10

<210> 4389  
<211> 5  
<212> PRT  
<213> Homo sapiens

<400> 4389  
Met Trp Leu Ala Cys  
1 5

<210> 4390  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 4390  
Met His Val Leu Pro Pro His Phe Cys Ser Ala  
1 5 10

<210> 4391  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 4391  
Asp Arg Tyr Phe Val Leu Ile Gln Met Gln  
1 5 10



<210> 4392  
 <211> 36  
 <212> PRT  
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<400> 4392  
 Met Cys His Pro Leu Thr Gly Glu Ser Gly Gly Val Val Gly Val Asn  
   1                  5                  10                  15  
 Val Leu Lys Ile Tyr Val Ser Cys Ile Leu Phe Glu Ser Ala Val Phe  
                   20                  25                  30  
 Ser Gln Gln Leu  
                   35

<210> 4393  
 <211> 47  
 <212> PRT  
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<400> 4393  
 Met Phe Trp Met Ser Leu Trp Val Ser Phe Ile Ile Met Leu His Asn  
   1                  5                  10                  15  
 Leu Tyr Thr Gly Tyr His Phe Arg Val Leu Lys Gly Asp Thr Ser Tyr  
                   20                  25                  30  
 Lys Glu Lys Asp Ala Cys Phe His Phe Leu Lys Lys Lys Lys Lys  
                   35                  40                  45

<210> 4394  
 <211> 33  
 <212> PRT  
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<400> 4394  
 Met Cys Phe Cys Leu Lys Ser Ile Asn Ile Trp Phe His Leu His Ser  
   1                  5                  10                  15  
 Asn Thr Trp Ile Gly Phe Ile Leu Phe Leu Leu Ala Phe Trp Ile Gln  
                   20                  25                  30  
 Asn

<210> 4395  
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 <212> PRT  
 <213> Homo sapiens

<400> 4395  
 Met Asp Ser Ser Ala Ala Val Leu Gly Val Leu Leu Lys Thr Leu Leu  
   1                  5                  10                  15  
 Leu Leu Trp Ser Cys Leu Leu Phe Pro Ser Gln Leu Val Lys Pro Pro



30

Ala Ser Pro Ala Leu His Ala Cys Ser  
50 55

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<211> 17
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<400> 4396  
Met Ser Tyr Ile Leu Asp Thr Phe Ser Leu Leu Leu Phe Leu Leu Tyr  
1 5 10 15

Phe

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<210> 4397
<211> 39
<212> PRT
<213> Homo sapiens
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<400> 4397  
Glu Gly Leu Gly Ala Ser Trp Leu Trp His Leu Thr Ser Trp Ala Ser  
1 5 10 15

Thr Ser Cys Ser Gln Asp Pro Cys Gly Asp Glu Arg Gly Ala Trp Lys  
20 25 30

Gly Leu Arg Pro Ser Thr Ala  
35

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<211> 35
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<213> Homo sapiens
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<400> 4398  
Met Ala Gln Val Leu Ser Trp Cys Ala Lys Glu Thr Trp Leu Leu Leu  
1 5 10 15

Gly Ile Ala Leu Arg Ser Ser Leu Ser Cys Pro Gln Pro Asn Trp Trp  
20 25 30

Ala Pro Cys  
35

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<210> 4399
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<213> Homo sapiens

<400> 4399

Gly Asn Pro Lys Lys Leu Trp Arg Arg Met Val Leu Leu Leu Thr Arg  
1 5 10 15

Gln Thr Tyr Leu Pro Leu Ala Leu Leu Cys Gly Lys  
20 25

<210> 4400

<211> 19

<212> PRT

<213> Homo sapiens

<400> 4400

Met Val Thr Val Val Gln Thr Leu Leu Leu Leu Thr Gln Asn Arg Ser  
1 5 10 15

Gly Ala Met

<210> 4401

<211> 72

<212> PRT

<213> Homo sapiens

<400> 4401

Met Pro Leu Gly Arg Leu Leu Pro Arg Leu Leu Phe Phe Leu Ile Val  
1 5 10 15

Thr Tyr Arg Leu Gly Val Leu Gly Thr Glu Ser Ser Gln Leu Leu Gln  
20 25 30

Tyr Glu Glu Thr Val His Leu Phe Cys His Leu Asp Leu Phe Ala Thr  
35 40 45

His Leu Leu Tyr Phe Leu Tyr Trp Lys Ile Phe Leu Leu Val Leu Ser  
50 55 60

Tyr Glu Phe Leu Phe Cys Phe Asn  
65 70

<210> 4402

<211> 26

<212> PRT

<213> Homo sapiens

<400> 4402

Leu Trp Trp Leu Tyr Ile Val Ser Val Ala Ile Ile Gln Leu Cys Cys  
1 5 10 15

Ser Ser Ala Asn Ala Asp Ile Asp Asn Met  
20 25







4407 4408 4409

<210> 4407  
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<220>  
<221> SITE  
<222> (3)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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<400> 4407  
Met Ser Xaa Ser Xaa Gly Thr Ser Val Xaa Phe Leu Arg Thr Arg Phe  
1 5 10 15  
Ser Leu Cys Ile Cys Gly Arg Asn Thr Pro Glu Val Met Leu Cys Tyr  
20 25 30

Ser

<210> 4408  
<211> 30  
<212> PRT  
<213> Homo sapiens

<400> 4408  
Met Phe Trp Cys Glu Phe Thr Ala Ser Phe Leu Leu Phe Leu Asn Ala  
1 5 10 15  
Ile Ser Gly Leu His Ile Asn Ser Ile Thr His Pro Trp Glu  
20 25 30

<210> 4409  
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<212> PRT  
<213> Homo sapiens

<400> 4409  
Met Ser Ser Leu Leu Leu Ile Ile Ile Leu Ala Leu Ser Leu Ala Tyr  
1 5 10 15

Glu



<210> 4410  
 <211> 6  
 <212> PRT  
 <213> Homo sapiens

<400> 4410  
 Leu Pro Gly Pro Cys Leu  
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<210> 4411  
 <211> 66  
 <212> PRT  
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 1 5 10 15  
 Phe Gly Cys Phe Cys Cys Pro Trp Leu Cys Ser Ala Leu Trp Glu Ala  
 20 25 30  
 Pro Gly Arg Pro Asn Val Gln Asp His Arg Gly Glu Ser Glu Leu Asp  
 35 40 45  
 Arg Lys Arg Thr Thr Ala Cys Val Gly Pro Leu Pro Thr Ile Lys Ile  
 50 55 60  
 Ala Pro  
 65

<210> 4412  
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 <213> Homo sapiens

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 1 5 10 15  
 Leu Ala Ile Leu Cys Ile Val Ala Asn Ile Leu Leu Tyr Phe Pro Asn  
 20 25 30  
 Gly Glu Thr Lys Tyr Ala Ser Glu Asn His Leu Ser Arg Phe Val Trp  
 35 40 45  
 Phe Phe Ser Gly Ile Val Gly Gly Gly Leu Leu Val Phe Leu Pro Ala  
 50 55 60  
 Phe Val Phe Ile Gly Leu Glu Lys Asp Asp Cys Cys Gly Cys Cys Gly  
 65 70 75 80  
 His Glu Asp Cys Gly Lys Arg Cys Ala Met Phe Ser Ser Val Leu Pro  
 85 90 95  
 Ala Ala Ile Gly Val Ala Gly Ser Gly Tyr Cys Val Ser Trp Gln Pro  
 100 105 110



Trp Ala Trp Arg Lys Asp His Tyr Val Leu Ile Leu Arg Ala Ser Gly  
115 120 125

Thr Thr Pro Leu Pro Thr Pro Met Asp Ser Thr Phe Trp Ile Pro Pro  
130 135 140

His Gly Pro Ser Ala Leu Asn Pro His Met Leu Leu Asn Gly Ile Ser  
145 150 155 160

Leu Cys Phe Leu Ser Phe Trp Pro Ser Val Glu Leu Asn Ser Ser Cys  
165 170 175

Val Ser Phe Lys  
180

<210> 4413  
<211> 41  
<212> PRT  
<213> Homo sapiens

<400> 4413  
Met Cys Leu Ile Gln Gly Met Tyr Leu Ile Thr His Phe Cys Thr Cys  
1 5 10 15

Thr Leu Val Trp Phe Cys Asn Leu Gln Phe Ser Asn Gln Ser Phe Ile  
20 25 30

Val Thr Phe Ser Leu Pro Val Ser Leu  
35 40

<210> 4414  
<211> 34  
<212> PRT  
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<400> 4414  
Met Ser Gly Leu Cys Glu Ser Arg Arg Glu Val Phe Gln Ile Met His  
1 5 10 15

Met Asp Val Glu Leu Leu Arg Leu Leu Glu Leu Trp Met Ala Val Leu  
20 25 30

Phe Arg

<210> 4415  
<211> 152  
<212> PRT  
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<400> 4415  
Met Glu Phe Leu Gly Pro Cys Gly Leu Arg Leu Val Glu Ser Arg Leu  
1 5 10 15







Phe Gly Gly Arg Glu Lys Glu Thr Arg Gln Lys Arg Asn Cys Arg Met  
 20 25 30

Arg Lys Glu Arg Gly Glu Lys Ser Ser Arg Arg Asn Leu Lys  
 35 40 45

<210> 4418  
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<220>  
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<400> 4418  
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 1 5 10 15

Xaa His His Trp His Cys His Pro His Glu Trp Gln Val  
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<220>  
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<220>  
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Thr Val Lys Leu Met Asn Arg Val Val Phe Gly Asn Gly Asn Thr Phe  
 20 25 30

Val Thr Asp Leu Tyr Thr Val Tyr Ser Ile Gly Lys Met Gly Gly Gly  
 35 40 45

Phe Leu Ile  
 50



[illegible][illegible][illegible][illegible][illegible][illegible]



Phe Lys Asn Lys Asn  
35

<210> 4423  
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<400> 4423  
Met Thr Ala Gly Trp Leu Val Ile Ala Val Gly Leu Val Arg Ala Tyr  
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Leu Ala Lys Gly Ser Tyr His Ser Leu Tyr Tyr Ser Ile Glu Lys Pro  
20 25 30  
Leu Lys Phe Phe Gln Thr Gly Ala Leu Leu Glu Ile Leu His Cys Ala  
35 40 45  
Ile Gly Ile Val Pro Ser Ser Val Val Leu Thr Ser Phe Gln Val Met  
50 55 60  
Ser Arg Val Phe Leu Ile Trp Ala Val Thr His Ser Val Lys Glu Val  
65 70 75 80  
Gln Ser Glu Asp Ser Val Leu Leu Phe Val Ile Ala Trp Thr Ile Thr  
85 90 95  
Glu Ile Ile Arg Tyr Ser Phe Tyr Thr Phe Ser Leu Leu Asn His Leu  
100 105 110  
Pro Tyr Leu Ile Lys Trp Ala Arg Tyr Thr Leu Phe Ile Val Leu Tyr  
115 120 125  
Pro Met Gly Val Ser Gly Glu Leu Leu Thr Ile Tyr Ala Ala Leu Pro  
130 135 140  
Phe Val Arg Gln Ala Gly Leu Tyr Ser Ile Ser Leu Pro Asn Lys Tyr  
145 150 155 160  
Asn Phe Ser Phe Asp Tyr Tyr Ala Phe Leu Ile Leu Ile Met Ile Ser  
165 170 175  
Tyr Ile Pro Ile Phe Pro Gln Leu Tyr Phe His Met Ile His Gln Arg  
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Arg Lys Ile Leu Ser His Thr Glu Glu His Lys Lys Phe Glu  
195 200 205

<210> 4424  
<211> 35  
<212> PRT  
<213> Homo sapiens

<400> 4424  
Met Ser Gly Thr Thr Ser Gly Leu Gln Leu Cys Leu Val Ile Met Met  
1 5 10 15







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Gly Trp Val Gly Leu Val Ala Cys Thr Ala Ile Pro Gln Trp Gln Met	20	25	30
Ser Ser Tyr Ala Gly Asp Asn Ile Ile Thr Ala Gln Ala Met Tyr Lys	35	40	45
Gly Leu Trp Met Asp Cys Val Thr Gln Ser Thr Gly Met Met Ser Cys	50	55	60
Lys Met Tyr Asp Ser Val Leu Ala Leu Ser Ala Ala Leu Gln Ala Thr	65	70	75
Arg Ala Leu Met Val Val Ser Leu Val Leu Gly Phe Leu Ala Met Phe	85	90	95
Val Ala Thr Met Gly Met Lys Cys Thr Arg Cys Gly Gly Asp Asp Lys	100	105	110
Val Lys Lys Ala Arg Ile Ala Met Gly Gly Gly Ile Ile Phe Ile Val	115	120	125
Ala Gly Leu Ala Ala Leu Val Ala Cys Ser Trp Tyr Gly His Gln Ile	130	135	140
Val Thr Asp Phe Tyr Asn Pro Leu Ile Pro Thr Asn Ile Lys Tyr Glu	145	150	155
Phe Gly Pro Ala Ile Phe Ile Gly Trp Ala Gly Ser Ala Leu Val Ile	165	170	175
Leu Gly Gly Ala Leu Leu Ser Cys Ser Cys Pro Gly Asn Glu Ser Lys	180	185	190
Ala Gly Tyr Arg Ala Pro Arg Ser Tyr Pro Lys Ser Asn Ser Ser Lys	195	200	205
Glu Tyr Val	210		

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 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 4429  
 Met Ser Phe Thr Ala His Ser Gly Trp Trp Val Ser Leu Leu Phe Trp  
 1 5 10 15  
 Val Leu Asp

<210> 4430  
 <211> 63  
 <212> PRT  
 <213> Homo sapiens



Table 1. Demographic characteristics of the study population	
Age (years)	Mean (SD)
Male	55.2 (10.5)
Female	56.8 (11.2)
Marital status	
Married	78.5%
Single	21.5%
Education level	
High school or above	65.2%
Below high school	34.8%
Occupation	
Professional	12.3%
Managerial	18.7%
Technical	25.4%
Service	32.1%
Unemployed	11.5%
Income (USD/month)	
< 1000	15.2%
1000-2000	28.7%
2000-3000	35.4%
> 3000	20.7%
Health insurance	
Yes	89.1%
No	10.9%
Smoking status	
Current smoker	18.3%
Former smoker	22.5%
Non-smoker	59.2%
Alcohol consumption	
Regular	12.1%
Occasional	25.8%
Never	62.1%
Family size	
1-2	35.4%
3-4	42.1%
5 or more	22.5%
Chronic diseases	
Hypertension	38.7%
Diabetes	15.2%
Heart disease	22.1%
Stroke	8.9%
Arthritis	18.3%
Chronic kidney disease	5.4%
Chronic liver disease	3.2%
Chronic respiratory disease	12.5%
Chronic mental health	7.8%
Chronic pain	14.1%
Chronic fatigue	9.3%
Chronic insomnia	11.7%
Chronic anxiety	13.5%
Chronic depression	10.2%
Chronic stress	16.8%
Chronic worry	14.9%
Chronic anger	12.3%
Chronic sadness	11.5%
Chronic loneliness	10.7%
Chronic isolation	9.8%
Chronic social withdrawal	8.9%
Chronic lack of interest	7.5%
Chronic loss of pleasure	6.8%
Chronic change in weight	5.9%
Chronic change in appetite	5.2%
Chronic change in sleep	4.7%
Chronic change in energy	4.1%
Chronic change in concentration	3.6%
Chronic change in memory	3.1%
Chronic change in personality	2.8%
Chronic change in behavior	2.5%
Chronic change in appearance	2.2%
Chronic change in voice	1.9%
Chronic change in smell	1.7%
Chronic change in taste	1.5%
Chronic change in vision	1.3%
Chronic change in hearing	1.1%
Chronic change in touch	0.9%
Chronic change in pain	0.7%
Chronic change in temperature	0.5%
Chronic change in sweating	0.4%
Chronic change in skin	0.3%
Chronic change in hair	0.2%
Chronic change in nails	0.1%
Chronic change in teeth	0.1%
Chronic change in mouth	0.1%
Chronic change in throat	0.1%
Chronic change in lungs	0.1%
Chronic change in heart	0.1%
Chronic change in stomach	0.1%
Chronic change in intestines	0.1%
Chronic change in bladder	0.1%
Chronic change in reproductive system	0.1%
Chronic change in immune system	0.1%
Chronic change in nervous system	0.1%
Chronic change in endocrine system	0.1%
Chronic change in circulatory system	0.1%
Chronic change in respiratory system	0.1%
Chronic change in digestive system	0.1%
Chronic change in urinary system	0.1%
Chronic change in reproductive system	0.1%
Chronic change in immune system	0.1%
Chronic change in nervous system	0.1%
Chronic change in endocrine system	0.1%
Chronic change in circulatory system	0.1%
Chronic change in respiratory system	0.1%
Chronic change in digestive system	0.1%
Chronic change in urinary system	0.1%
Chronic change in reproductive system	0.1%
Chronic change in immune system	0.1%
Chronic change in nervous system	0.1%
Chronic change in endocrine system	0.1%
Chronic change in circulatory system	0.1%
Chronic change in respiratory system	0.1%
Chronic change in digestive system	0.1%
Chronic change in urinary system	0.1%
Chronic change in reproductive system	0.1%
Chronic change in immune system	0.1%
Chronic change in nervous system	0.1%
Chronic change in endocrine system	0.1%
Chronic change in circulatory system	0.1%
Chronic change in respiratory system	0.1%
Chronic change in digestive system	0.1%
Chronic change in urinary system	0.1%
Chronic change in reproductive system	0.1%
Chronic change in immune system	0.1%
Chronic change in nervous system	0.1%
Chronic change in endocrine system	0.1%
Chronic change in circulatory system	0.1%
Chronic change in respiratory system	0.1%
Chronic change in digestive system	0.1%
Chronic change in urinary system	0.1%
Chronic change in reproductive system	0.1%
Chronic change in immune system	0.1%
Chronic change in nervous system	0.1%
Chronic change in endocrine system	0.1%
Chronic change in circulatory system	0.1%
Chronic change in respiratory system	0.1%
Chronic change in digestive system	0.1%
Chronic change in urinary system	0.1%
Chronic change in reproductive system	0.1%
Chronic change in immune system	0.1%
Chronic change in nervous system	0.1%
Chronic change in endocrine system	0.1%
Chronic change in circulatory system	0.1%
Chronic change in respiratory system	0.1%
Chronic change in digestive system	0.1%
Chronic change in urinary system	0.1%
Chronic change in reproductive system	0.1%
Chronic change in immune system	0.1%
Chronic change in nervous system	0.1%
Chronic change in endocrine system	0.1%
Chronic change in circulatory system	0.1%
Chronic change in respiratory system	0.1%
Chronic change in digestive system	0.1%

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<210> 4431
<211> 27
<212> PRT
<213> Homo sapiens
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```
<210> 4432
<211> 216
<212> PRT
<213> Homo sapiens
```

2076



140

Lys Tyr Lys Lys Val Tyr Trp Tyr  
210 215

Val Asp Phe Ala Ser  
20



Table 1. Demographic characteristics of the study population	
Age (years)	Mean (SD)
Male	55.2 (10.5)
Female	56.8 (11.2)
Marital status	
Married	78.5%
Single	21.5%
Education level	
High school or above	65.2%
Below high school	34.8%
Occupation	
Professional	12.3%
Managerial	18.7%
Technical	25.4%
Service	32.1%
Unemployed	11.5%
Income (USD/month)	
< 1000	15.6%
1000-2000	28.9%
2000-3000	35.2%
> 3000	20.3%
Health status	
Good	72.1%
Fair	27.9%
Chronic diseases	
Hypertension	45.3%
Diabetes	32.1%
Heart disease	28.7%
Stroke	15.4%
Arthritis	38.9%
Chronic kidney disease	12.6%
Chronic lung disease	18.2%
Chronic liver disease	10.5%
Chronic mental illness	8.7%
Chronic pain	22.3%
Chronic fatigue	19.8%
Chronic stress	25.6%
Chronic anxiety	14.9%
Chronic depression	11.2%
Chronic insomnia	16.7%
Chronic headache	20.4%
Chronic back pain	23.1%
Chronic neck pain	18.8%
Chronic joint pain	21.5%
Chronic muscle pain	19.2%
Chronic skin conditions	13.4%
Chronic eye conditions	10.1%
Chronic ear conditions	8.9%
Chronic nose conditions	7.6%
Chronic throat conditions	6.3%
Chronic mouth conditions	5.2%
Chronic stomach conditions	4.1%
Chronic liver conditions	3.8%
Chronic kidney conditions	3.5%
Chronic bladder conditions	3.2%
Chronic prostate conditions	2.9%
Chronic uterus conditions	2.6%
Chronic ovary conditions	2.3%
Chronic breast conditions	2.0%
Chronic skin conditions	1.7%
Chronic eye conditions	1.4%
Chronic ear conditions	1.1%
Chronic nose conditions	0.8%
Chronic throat conditions	0.5%
Chronic mouth conditions	0.2%
Chronic stomach conditions	0.1%
Chronic liver conditions	0.1%
Chronic kidney conditions	0.1%
Chronic bladder conditions	0.1%
Chronic prostate conditions	0.1%
Chronic uterus conditions	0.1%
Chronic ovary conditions	0.1%
Chronic breast conditions	0.1%
Chronic skin conditions	0.1%
Chronic eye conditions	0.1%
Chronic ear conditions	0.1%
Chronic nose conditions	0.1%
Chronic throat conditions	0.1%
Chronic mouth conditions	0.1%
Chronic stomach conditions	0.1%
Chronic liver conditions	0.1%
Chronic kidney conditions	0.1%
Chronic bladder conditions	0.1%
Chronic prostate conditions	0.1%
Chronic uterus conditions	0.1%
Chronic ovary conditions	0.1%
Chronic breast conditions	0.1%
Chronic skin conditions	0.1%
Chronic eye conditions	0.1%
Chronic ear conditions	0.1%
Chronic nose conditions	0.1%
Chronic throat conditions	0.1%
Chronic mouth conditions	0.1%
Chronic stomach conditions	0.1%
Chronic liver conditions	0.1%
Chronic kidney conditions	0.1%
Chronic bladder conditions	0.1%
Chronic prostate conditions	0.1%
Chronic uterus conditions	0.1%
Chronic ovary conditions	0.1%
Chronic breast conditions	0.1%
Chronic skin conditions	0.1%
Chronic eye conditions	0.1%
Chronic ear conditions	0.1%
Chronic nose conditions	0.1%
Chronic throat conditions	0.1%
Chronic mouth conditions	0.1%
Chronic stomach conditions	0.1%
Chronic liver conditions	0.1%
Chronic kidney conditions	0.1%
Chronic bladder conditions	0.1%
Chronic prostate conditions	0.1%
Chronic uterus conditions	0.1%
Chronic ovary conditions	0.1%
Chronic breast conditions	0.1%
Chronic skin conditions	0.1%
Chronic eye conditions	0.1%
Chronic ear conditions	0.1%
Chronic nose conditions	0.1%
Chronic throat conditions	0.1%
Chronic mouth conditions	0.1%
Chronic stomach conditions	0.1%
Chronic liver conditions	0.1%
Chronic kidney conditions	0.1%
Chronic bladder conditions	0.1%
Chronic prostate conditions	0.1%
Chronic uterus conditions	0.1%
Chronic ovary conditions	0.1%
Chronic breast conditions	0.1%
Chronic skin conditions	0.1%
Chronic eye conditions	0.1%
Chronic ear conditions	0.1%
Chronic nose conditions	0.1%
Chronic throat conditions	0.1%
Chronic mouth conditions	0.1%
Chronic stomach conditions	0.1%
Chronic liver conditions	0.1%
Chronic kidney conditions	0.1%
Chronic bladder conditions	0.1%
Chronic prostate conditions	0.1%
Chronic uterus conditions	0.1%
Chronic ovary conditions	0.1%
Chronic breast conditions	0.1%
Chronic skin conditions	0.1%
Chronic eye conditions	0.1%
Chronic ear conditions	0.1%
Chronic nose conditions	0.1%
Chronic throat conditions	0.1%
Chronic mouth conditions	0.1%
Chronic stomach conditions	0.1%
Chronic liver conditions	0.1%
Chronic kidney conditions	0.1%
Chronic bladder conditions	0.1%
Chronic prostate conditions	0.1%
Chronic uterus conditions	0.1%
Chronic ovary conditions	0.1%
Chronic breast conditions	0.1%
Ch	















60

<400> 4452







[illegible]

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<210> 4458
<211> 70
<212> PRT
<213> Homo sapiens
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<211> 53
<212> PRT
<213> Homo sapiens
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<400> 4459
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  1             5             10             15
Val Phe Ser Gln His Cys Gln Leu Phe Leu Arg Ser Leu Leu Leu Pro
      20             25             30
Leu Leu Leu Cys Thr His His Val Cys Met Glu Cys Ala Arg Arg Gly
      35             40             45
Arg Gly Ser Gly Arg
      50

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2084



<211> 18  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (9)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4460  
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           1                  5                  10                  15

Phe Phe

<210> 4461  
 <211> 61  
 <212> PRT  
 <213> Homo sapiens

<400> 4461  
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           1                  5                  10                  15

Cys Met Glu Glu Ala Arg Leu Arg Ala Glu Met Trp Pro Glu Pro Ser  
                   20                  25                  30

Leu Tyr Arg Ser Phe Asn Leu Glu Leu Ser Arg Cys His Phe Leu Pro  
           35                  40                  45

Leu Cys Leu Leu Val Val Ser Asp Ile Tyr Ser Lys Gln  
           50                  55                  60

<210> 4462  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens

<400> 4462  
 Met Leu Leu Asp Ala Pro Ala Ile Ile Phe Leu Leu Val Ala Phe Pro  
           1                  5                  10                  15

Asn Tyr Phe His Lys Asn Tyr Phe Ser Tyr Tyr Met  
           20                  25

<210> 4463  
 <211> 26  
 <212> PRT  
 <213> Homo sapiens

<400> 4463  
 Met Ala Tyr Phe Tyr Leu Leu Gly Val Leu Gln Val Leu Pro Ser Leu  
           1                  5                  10                  15



His His Tyr Met Ser Ser Glu Val Leu Phe  
 20 25

<210> 4464  
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<400> 4464  
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 1 5 10

<210> 4465  
 <211> 37  
 <212> PRT  
 <213> Homo sapiens

<400> 4465  
 Met Lys Ile Leu Leu Leu Cys Leu Cys Leu Ile Leu Leu Arg Val Arg  
 1 5 10 15  
 Ser Cys Arg Arg Lys Ala Ala Arg Ala Ala Leu Gly Met Glu Ala Ala  
 20 25 30  
 Asp Ala Val Thr Asp  
 35

<210> 4466  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens

<400> 4466  
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 1 5 10 15  
 Pro Thr Thr Asp Leu His Ala Thr Ala Asn Ser Ser  
 20 25

<210> 4467  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 4467  
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 1 5 10 15



<210> 4468  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 4468  
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 Leu Ile Ile Ile Leu Lys Gly Ser Glu Ile Cys Asp Gly Ile Arg Phe  
                   20                  25                  30

<210> 4469  
 <211> 29  
 <212> PRT  
 <213> Homo sapiens

<400> 4469  
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   1                  5                  10                  15  
 Glu Cys Ile Asp Arg Lys Ser Met Ser Tyr Leu Lys Leu  
                   20                  25

<210> 4470  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 4470  
 Met His Leu Ile Trp Leu Cys Val Thr Gly Leu Phe Ile Ser Ala Thr  
   1                  5                  10                  15  
 Glu Ile His Ala Val Cys Thr Tyr Asn Arg Tyr Ile Val Ser Ala Tyr  
                   20                  25                  30

<210> 4471  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 4471  
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   1                  5                  10                  15  
 Ser Gly Asn Val Ser Val Tyr Cys Trp Pro Tyr Ser Val Thr Asn Pro  
                   20                  25                  30  
 Ala Ala Pro Cys Ile Ser Trp Leu Pro Thr Pro Thr Ser Pro Trp Thr



45

Met Trp Ala Ala Cys Ser Ser Asn Ser Thr Ser  
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<210> 4472
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<212> PRT
<213> Homo sapiens
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Ile Ser Met Asn His Cys Phe Met  
35 40

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<210> 4473
<211> 44
<212> PRT
<213> Homo sapiens
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Leu Ser Pro Ser Phe Leu Gly Gly Arg Gln Gly His  
35 40

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<210> 4474
<211> 21
<212> PRT
<213> Homo sapiens
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Val Pro Val Val Thr  
20



Table 1. Demographic characteristics of the study population	
Age (years)	Mean (SD)
Male	55.2 (10.5)
Female	56.8 (11.2)
Marital status	
Married	78.5%
Single	21.5%
Education level	
High school or above	65.2%
Below high school	34.8%
Occupation	
Professional	12.3%
Managerial	18.7%
Technical	25.4%
Service	32.1%
Unemployed	11.5%
Income (USD/month)	
< 1000	15.2%
1000-2000	35.8%
2000-3000	28.5%
> 3000	20.5%
Health status	
Good	72.3%
Fair	27.7%
Chronic diseases	
Hypertension	45.2%
Diabetes	32.1%
Heart disease	28.5%
Stroke	15.4%
Arthritis	38.7%
Chronic kidney disease	12.3%
Chronic lung disease	18.9%
Chronic liver disease	10.5%
Chronic mental illness	8.7%
Chronic pain	22.3%
Chronic fatigue	15.4%
Chronic stress	25.6%
Chronic anxiety	12.3%
Chronic depression	10.5%
Chronic insomnia	18.9%
Chronic headache	15.4%
Chronic dizziness	12.3%
Chronic nausea	8.7%
Chronic vomiting	5.4%
Chronic diarrhea	10.5%
Chronic constipation	12.3%
Chronic cough	15.4%
Chronic asthma	18.9%
Chronic allergies	22.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%
Chronic throat conditions	10.5%
Chronic mouth conditions	12.3%
Chronic skin conditions	10.5%
Chronic eye conditions	12.3%
Chronic ear conditions	8.7%
Chronic nose conditions	5.4%

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<213> Homo sapiens
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<213> Homo sapiens
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<210> 4478
<211> 37
<212> PRT
<213> Homo sapiens
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2089



30



[illegible]

<210> 4482







Met Gln Leu Ser Leu Pro Lys Ile Phe Phe Tyr Leu Cys Phe Cys Leu  
1 5 10 15

Gln Leu Leu Pro Leu Glu Val Ser Leu Ser Phe Lys Phe Arg Glu Pro  
20 25 30

Cys Leu Trp His  
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<210> 4487  
<211> 31  
<212> PRT  
<213> Homo sapiens

<400> 4487  
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Phe Leu Ile Tyr Thr Val Asn Ser Thr Tyr Ile Ile Gly Leu Val  
20 25 30

<210> 4488  
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1 5 10 15

Leu Pro Asp Phe Asp Arg Ser Gly Met Thr Pro Ser Ser Ala Pro Pro  
20 25 30

Trp Leu Pro Met Ala Gly Cys Ser Cys Trp Leu Met Leu Val Pro Ser  
35 40 45

Phe Gly Cys Ser Gln Ser Asn Glu Thr Pro Trp Ile Ile Leu Leu Arg  
50 55 60

Met Leu Ser Val Asn Leu Asn Ser  
65 70

<210> 4489  
<211> 58  
<212> PRT  
<213> Homo sapiens

<400> 4489  
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1 5 10 15

Val Val Ile Phe Ser Leu Leu Glu Tyr Ile Lys Trp Leu Ile Trp Gly  
20 25 30

Gly Lys Leu Ile Leu Asn Ile Asn Gly Gly Glu Lys Gly Thr Val Phe



35

40

45

Thr Leu Lys Cys Lys Ser Glu His Thr Lys  
50 55

<210> 4490  
<211> 49  
<212> PRT  
<213> Homo sapiens

<400> 4490  
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20 25 30  
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35 40 45

Leu

<210> 4491  
<211> 35  
<212> PRT  
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1 5 10 15  
Trp Pro Glu Thr Arg Glu Thr Arg Val Lys Ser Tyr Leu Pro Leu Pro  
20 25 30  
Val Met Pro  
35

<210> 4492  
<211> 36  
<212> PRT  
<213> Homo sapiens

<400> 4492  
Met Ala Leu Thr Leu Pro Ser Gln Trp Val Phe Leu Val Phe Ile Leu  
1 5 10 15  
Asp Asp Leu Tyr Ala His Leu Ser Leu Ser Arg Asn Phe Cys Trp Lys  
20 25 30  
His Leu Leu Phe  
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<210> 4493  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 4493  
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1 5 10 15  
Leu Arg Gln Val Thr Tyr Phe Ser Glu Ser Pro Phe Leu Asn Leu Phe  
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Val Asn

<210> 4494  
<211> 18  
<212> PRT  
<213> Homo sapiens

<400> 4494  
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Leu Ile

<210> 4495  
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<212> PRT  
<213> Homo sapiens

<400> 4495  
Leu Glu Phe Phe Phe Phe Phe Phe Val Leu  
1 5 10

<210> 4496  
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<213> Homo sapiens

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Pro Ser Pro His Leu His Phe Ser Ala Gln Met Leu Pro Ser Pro  
20 25 30

<210> 4497  
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<213> Homo sapiens



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Asn Leu Gln Phe Ser Met Thr Gln Leu  
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<210> 4498  
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<400> 4498  
Met Ser Val  
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<210> 4499  
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<212> PRT  
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<400> 4500  
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<210> 4501  
<211> 25  
<212> PRT  
<213> Homo sapiens

<400> 4501  
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1 5 10 15  
Phe Asn Leu Pro Thr Glu Tyr Gln Ala  
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<210> 4502  
<211> 67  
<212> PRT  
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<400> 4502

Pro Pro Asn Leu Cys Leu Thr Phe Leu Leu Pro Phe Val Leu Leu Arg  
1 5 10 15

Leu Ser Val Leu Gly Asn Thr Val Phe Leu Arg Val Cys Gly Gly Ser  
20 25 30

Tyr Pro Ser Ser Phe Arg Thr Arg Asp Leu Leu Asp Trp Ser Gly Pro  
35 40 45

Gln Thr Asp Pro Cys Ser Leu Thr Thr Gly Tyr Pro Gly Thr Cys Val  
50 55 60

Pro Ser Leu  
65

<210> 4503

<211> 38

<212> PRT

<213> Homo sapiens

<400> 4503

Met Leu Val Ser Pro Arg Arg Val Tyr Phe Leu Asp Leu Thr Cys Phe  
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Val Ala Phe Leu Leu Leu Val Gln Cys Ser Val Leu Thr Val Cys Pro  
20 25 30

Gln Val Thr Glu Glu Glu  
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<210> 4504

<211> 34

<212> PRT

<213> Homo sapiens

<400> 4504

Met Asn Ile Thr Ser His Gln Pro Pro His His Asn Phe Met Leu Leu  
1 5 10 15

Leu Asp Ile Ile Phe Val Leu Ala Trp Ile Leu Met Leu Leu Thr Asn  
20 25 30

Ile Ser

<210> 4505

<211> 61

<212> PRT

<213> Homo sapiens

<400> 4505

Met Val Thr Ile Phe Asn Ile Ile Thr Thr Thr Thr Ile Leu Pro Thr  
1 5 10 15







20

25

30

<210> 4509  
 <211> 12  
 <212> PRT  
 <213> Homo sapiens

<400> 4509  
 Met Phe Ile Ala Cys Leu Leu Gln Ser Leu Cys Ile  
     1                    5                    10

<210> 4510  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens

<400> 4510  
 Met Val Phe Gln Thr Phe Tyr Cys Ile Ser Leu Val Leu Phe Ala His  
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 Glu Val Ser Leu Leu Cys Val Cys Val Tyr Val Tyr  
                     20                    25

<210> 4511  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 4511  
 Met Leu Cys Phe Ser Phe Leu Cys Leu Ser Leu Leu Leu Val Ser Ala  
     1                    5                    10                    15  
 Gln Gly

<210> 4512  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

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 Gln Gly

<210> 4513  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens



項目	単位	数値	単位	数値
1. 総人口	人	1,234,567	2. 男性人口	612,345
3. 女性人口	人	622,222	4. 0歳人口	15,678
5. 1歳人口	人	14,567	6. 2歳人口	13,456
7. 3歳人口	人	12,345	8. 4歳人口	11,234
9. 5歳人口	人	10,123	10. 6歳人口	9,012
11. 7歳人口	人	8,901	12. 8歳人口	7,890
13. 9歳人口	人	6,789	14. 10歳人口	5,678
15. 11歳人口	人	4,567	16. 12歳人口	3,456
17. 13歳人口	人	2,345	18. 14歳人口	1,234
19. 15歳人口	人	1,123	20. 16歳人口	1,012
21. 17歳人口	人	901	22. 18歳人口	890
23. 19歳人口	人	789	24. 20歳人口	678
25. 21歳人口	人	567	26. 22歳人口	456
27. 23歳人口	人	345	28. 24歳人口	234
29. 25歳人口	人	123	30. 26歳人口	112
31. 27歳人口	人	101	32. 28歳人口	90
33. 29歳人口	人	89	34. 30歳人口	78
35. 31歳人口	人	67	36. 32歳人口	56
37. 33歳人口	人	45	38. 34歳人口	34
39. 35歳人口	人	23	40. 36歳人口	12
41. 37歳人口	人	11	42. 38歳人口	10
43. 39歳人口	人	9	44. 40歳人口	8
45. 41歳人口	人	7	46. 42歳人口	6
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141. 137歳人口	人	1	142. 138歳人口	1
143. 139歳人口	人	1	144. 140歳人口	1
145. 141歳人口	人	1	146. 142歳人口	1
147. 143歳人口	人	1	148. 144歳人口	1
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Met Thr Leu Ile Ala Leu Glu  
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<211> 67

<212> PRT

<213> Homo sapiens

Met His Thr Tyr Ile Leu Val Cys Ile Cys Ile His Ile Tyr Leu Cys  
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Val Tyr Ala Tyr Ile Tyr Thr Cys Met Cys Met Tyr Ile Cys Ile His  
20 25 30

Ile Tyr Leu Tyr Val Tyr Val His Met His Thr Tyr Ile Tyr Thr His  
35 40 45

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Cys Arg Leu  
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<211> 112

<212> PRT

<213> Homo sapiens

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1 5 10 15

Thr Ala Leu Thr Glu Glu Ala Ala Val Thr Val Thr Pro Pro Ile Thr  
20 25 30

Ala Gln Gln Gly Asn Trp Thr Val Asn Lys Thr Glu Ala Asp Asn Ile  
35 40 45

Glu Gly Pro Ile Ala Leu Lys Phe Ser His Leu Cys Leu Glu Asp His  
50 55 60

Asn Ser Tyr Cys Ile Asn Gly Ala Cys Ala Phe His His Glu Leu Glu  
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Lys Ala Ile Cys Arg Cys Phe Thr Gly Tyr Thr Gly Glu Arg Cys Leu  
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 Phe Phe

<210> 4517  
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 <213> Homo sapiens

<400> 4517  
 Met Gln Leu Val Tyr Val Leu Trp Leu Leu Ile Ile Lys Val Thr Lys  
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 Gly Lys Val Glu Lys Ile Thr Ala Met Gln Ser Arg Thr Glu Lys Glu  
                           20                          25                          30  
 Ala Ser Ser Ile  
                   35

<210> 4518  
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<400> 4518  
 Met Asn Ala Val Thr Leu Pro Ile Leu Phe Thr Phe Val Ser Pro Val  
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 Pro Ile Val Val His Gly Ala Glu Trp Pro Phe Asn Lys Tyr Leu Leu  
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 Asn Lys

<210> 4519  
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 <213> Homo sapiens

<400> 4519



Met Gln Glu Ile Leu Pro Pro Gly Ser His Thr Gly Phe Ser Gly Leu  
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His Leu Pro Phe Ile Gly Phe Thr Phe Thr Thr Glu Arg Tyr Val Trp  
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Ile Tyr His Ser Pro Gly Arg His Phe Pro Cys Gly Arg  
35 40 45

<210> 4520

<211> 65

<212> PRT

<213> Homo sapiens

<400> 4520

Met Ile Trp Leu Ser Val Cys Leu Leu Leu Val Tyr Lys Asn Ala Cys  
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Asp Phe Cys Thr Leu Ile Leu Tyr Pro Glu Thr Leu Leu Lys Leu Leu  
20 25 30

Ile Ser Leu Arg Arg Phe Trp Ala Glu Thr Met Gly Phe Ser Arg Tyr  
35 40 45

Thr Ile Met Ser Ser Ala Asn Arg Asp Asn Leu Thr Ser Ser Phe Pro  
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Asn  
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<210> 4521

<211> 37

<212> PRT

<213> Homo sapiens

<400> 4521

Met Lys Ser Cys Gln Asp Ser Asp Ser Pro Phe Pro Val Ile Leu Leu  
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Met Ile Ser Pro Asn Thr Leu Gln Ala Thr Val Thr Thr Lys Asn Thr  
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Val Ser Ala Gly Leu  
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<211> 43

<212> PRT

<213> Homo sapiens

<400> 4522

Met Tyr Leu Phe Arg Trp Phe Phe Val Val Thr Tyr Phe Ile Val Leu  
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Ile Ser Cys Phe Cys Ile Thr Val Pro Ile Ala Asn Lys Ser Leu Gly



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Gln Phe Ala Phe Leu Lys Lys Lys Lys Lys Lys  
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<210> 4524  
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 <213> Homo sapiens

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 Met Gly Asn Leu Leu Leu Leu Gln Leu Met Leu Leu Lys Leu Leu Thr  
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Val Ile Pro Phe Pro Trp Leu Phe Phe Gly Glu Lys Ile Ile Cys Ser  
           20                  25                  30

<210> 4525  
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<400> 4525  
 Met Phe Pro  
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<210> 4526  
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<400> 4526  
 Gly Arg His Thr Trp Ser Leu Leu Leu Ala Ala Leu Ala Cys Leu Val  
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Pro Leu Leu His Trp Asn Ile Arg Arg  
           20                  25

<210> 4527



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Pro Leu Ser Leu Gly Gly Trp  
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1 5 10 15

Gly Ala Ser Asp Leu Met Pro Ser Ile Leu Ser Gly Phe Ser Leu  
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<400> 4532  
Met Tyr Asn Leu Leu Tyr Phe Pro Leu Cys Ile Leu Leu Trp Val Phe  
1 5 10 15

Cys Gly Ser Gln Asp Ser Ser Leu Arg Phe Ile Ser His Glu Ser  
20 25 30

<210> 4533  
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<212> PRT  
<213> Homo sapiens

<400> 4533  
Met Pro Ser Ala Arg His Cys Ile Ala Ile Ile Ser Phe Asn Leu Leu  
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Leu Ile Leu Trp Val Gly Ile Phe Ile Leu Ile Ser Glu Thr Arg Lys  
20 25 30

Leu Arg Val Arg Glu Asn  
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<400> 4534  
Met Ser His Phe His Ser Gln Asn Gln Met Tyr Leu Phe Ser Ala Phe  
1 5 10 15

Leu Trp Glu Leu Leu Leu Ser Ala Gly Ile Leu Lys Pro Asn Ile His



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25

30

Phe Gln Phe Phe Gln Leu Leu Ser  
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 <213> Homo sapiens

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 Met Gln Lys Val Thr Thr Leu Arg His Ile Glu Asn Cys Leu Ala Gly  
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Lys Cys

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Met Thr Gly Leu Leu Gly Met Glu Leu Val Ala Ser Gly Ala Thr Asp  
 20 25 30

Gly Pro Thr Gly Met Arg Ala Thr Asn Arg Asn Phe Asp Ser Ile Trp  
 35 40 45

Gln Asn Arg Ile Ser Asn Leu Asn Ser Leu Ser Thr Ser Ser Phe Cys  
 50 55 60

Tyr Lys Gly Lys Pro Ser Gly Asn Val Glu Ala Cys Ala Pro Arg Ser  
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Pro Glu Lys Gly Asn Arg Arg Gly  
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 <212> PRT  
 <213> Homo sapiens

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<210> 4538  
 <211> 55  
 <212> PRT



<213> Homo sapiens

<400> 4538

Met Ser Gly Trp Gln Ala Trp Tyr Leu Ala Arg Ala Leu Ala Val Gly  
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Val Leu Met Gly Cys Thr Asp His Thr Ala Tyr Val Leu Ala Ile Pro  
20 25 30  
Ser Cys Ser Pro Ala Arg Ser Leu Lys His Thr Ser Leu Ala Phe Leu  
35 40 45  
Phe Phe Cys Ser Phe Phe Asn  
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<210> 4539

<211> 80

<212> PRT

<213> Homo sapiens

<400> 4539

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1 5 10 15  
Ser Leu Ser Glu Ala Glu Gly Thr Ser Cys Pro Ser Pro Leu Arg His  
20 25 30  
Gly Phe Leu Ile Ala Gly Arg Gly Gly Leu Gly Val Asp Ile Gln His  
35 40 45  
Ser Ser Arg Asn Arg Thr Pro Ser Glu Asp Glu Ala Ser Gly Leu Pro  
50 55 60  
Pro Ala Trp Gln Thr Gln Pro Val Thr Pro Asn Ala Ala Met Ala Trp  
65 70 75 80

<210> 4540

<211> 24

<212> PRT

<213> Homo sapiens

<400> 4540

Met Val Val Leu Leu Glu Ile Phe Leu Leu Leu Ala Tyr Val Leu Trp  
1 5 10 15  
Asn Tyr Thr Cys Ile Thr Asn Asp  
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<210> 4541

<211> 31

<212> PRT

<213> Homo sapiens



Table 1. Demographic characteristics of the study population	
Age (years)	Mean (SD)
Male	55.2 (10.5)
Female	56.8 (11.2)
Marital status	
Married	78.5%
Single	21.5%
Education level	
High school or above	65.2%
Below high school	34.8%
Occupation	
White collar	45.1%
Blue collar	54.9%
Income (USD/month)	
< 1000	12.3%
1000-2000	35.7%
2000-3000	28.9%
> 3000	23.1%
Health insurance	
Yes	89.4%
No	10.6%
Comorbidities	
Hypertension	42.1%
Diabetes	18.5%
Cholesterol	31.2%
Smoking status	
Current smoker	15.3%
Former smoker	22.7%
Non-smoker	62.0%
Alcohol consumption	
Regular	8.9%
Occasional	14.5%
Never	76.6%

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<212> PRT
<213> Homo sapiens
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<213> Homo sapiens
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 Met Leu  
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<210> 4546  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 4546  
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 Ser Gln Leu Cys Lys Tyr Thr Ala Ile Tyr Leu Tyr Thr Tyr Phe  
 20 25 30

<210> 4547  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 4547  
 Met Ser Ile Pro His Leu Trp Cys His Phe Phe Thr Phe Leu Leu Pro  
 1 5 10 15  
 Cys Ile Lys Arg Gln Lys Ile His Ile Lys Leu Cys His Val Phe  
 20 25 30

<210> 4548  
 <211> 36  
 <212> PRT  
 <213> Homo sapiens

<400> 4548  
 Met Ala Cys Leu Glu Leu Leu Ile Leu Val Ser Phe Leu Thr Ser Val  
 1 5 10 15  
 Ile Gln Thr Gln Pro Pro Arg Glu Leu Asp Pro Ser Leu Phe Ser Val  
 20 25 30  
 Phe Ser Leu Ala  
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<210> 4549  
 <211> 36  
 <212> PRT  
 <213> Homo sapiens







45

Val Lys Gly Leu Phe Pro Met Cys Ser Ala  
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<210> 4554
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<212> PRT
<213> Homo sapiens
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<400> 4554  
Met Val Phe Pro Phe Leu Ser Phe Ala Ser Ser Cys Thr Leu Ser Met  
1 5 10 15

Val Phe Ser Asp Ser Ile Phe Leu Asn Ser Leu Phe Ile Phe Leu Gly  
20 25 30

Asn Phe Leu Leu  
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<210> 4555
<211> 73
<212> PRT
<213> Homo sapiens
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Met Leu His Ile Leu Phe Met Gly Leu Arg Val Asn Leu Asn His Glu
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Thr Phe Leu Ile Ile Cys Cys Glu Ile Tyr Gln Ala Trp Met Ile Ser  
20 25 30

Val Phe Leu Val Val Cys Cys Phe Phe Lys Glu Val Ile Gln Val Pro  
35 40 45

Leu Leu Ser Cys Gln His Thr Lys Leu Leu Lys Lys Leu Thr Ile Ser  
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Phe Arg Ser Asn Ser Gln Pro Val Glu  
65 70

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<210> 4556
<211> 9
<212> PRT
<213> Homo sapiens
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<400> 4556  
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 <212> PRT  
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<400> 4557  
 Met Phe Ile Thr Pro Leu Ser Trp Ser Leu Leu Ile Trp Val Leu Leu  
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 Gly Phe Leu Leu Leu Phe Leu Asn Tyr Ser Arg Leu Leu Tyr Ile Leu  
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 Asp Phe

<210> 4558  
 <211> 51  
 <212> PRT  
 <213> Homo sapiens

<400> 4558  
 His Phe Ser Lys Phe Thr Leu Ser Leu Leu Ala Ser Gly Arg Tyr Ile  
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 Tyr Ser His Met Val Phe Thr Phe Phe Ser Ile Val Leu Glu Ala Leu  
                     20                    25                    30  
 Ile Met Leu Val Glu Gln Leu Thr Ser Arg Val Phe Phe Pro Ala Cys  
                     35                    40                    45  
 His Thr Cys  
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<210> 4559  
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 <212> PRT  
 <213> Homo sapiens

<400> 4559  
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 Lys His Ile Leu Leu Trp Cys Leu Phe Phe Leu Leu Ala Val  
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<210> 4560  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 4560  
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Glu Lys Val Phe Tyr His Thr Leu Thr Pro Tyr Ile  
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<400> 4564







<210> 4566  
 <211> 37  
 <212> PRT  
 <213> Homo sapiens

<400> 4566  
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 Ala Cys Ala Gly Gly  
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<210> 4567  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens

<400> 4567  
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<210> 4568  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 4568  
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 Ala Asp Asn Ser  
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<210> 4569  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 4569  
 Met Trp Leu Ile Leu Leu Ala Ile Pro Gly Val Ala Ala His Ala Trp  
 1 5 10 15  
 Leu Val Trp Val His Arg Gly Ser His Gly Trp Ala Gln Gln Arg Gly  
 20 25 30  
 Pro Ser Gly Glu Gly Phe



<210> 4570  
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 <213> Homo sapiens

<400> 4570  
 Met Cys Phe Tyr His His Arg Glu Thr Ala Phe Lys Ser Thr Tyr Leu  
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 Tyr Gly Thr Ala Val Thr Arg His Ile His Pro Ser Arg Thr Asp Ala  
                           20                          25                          30  
 Cys Asp Pro Glu Ala Arg Arg Ser Phe Val Leu Gly Asp Val His Ile  
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 Gly Ile Tyr Leu Thr Ala Lys Glu Pro Phe Ile Tyr Ile Tyr Ile  
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<210> 4571  
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 <212> PRT  
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<400> 4571  
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 Ser Trp Gly Ala Arg Ser Arg Ile Ser Leu Ile Trp Arg Cys Met Ala  
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 Cys Cys Val  
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<210> 4572  
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 <212> PRT  
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<400> 4572  
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<210> 4573  
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 <212> PRT



Table 1. Demographic characteristics of the study population	
Age (years)	Mean (SD)
18-24	20.5 (2.5)
25-34	29.5 (4.5)
35-44	39.5 (5.5)
45-54	49.5 (6.5)
55-64	59.5 (7.5)
65-74	69.5 (8.5)
75-84	79.5 (9.5)
85-94	89.5 (10.5)
95-104	99.5 (11.5)
105-114	109.5 (12.5)
115-124	119.5 (13.5)
125-134	129.5 (14.5)
135-144	139.5 (15.5)
145-154	149.5 (16.5)
155-164	159.5 (17.5)
165-174	169.5 (18.5)
175-184	179.5 (19.5)
185-194	189.5 (20.5)
195-204	199.5 (21.5)
205-214	209.5 (22.5)
215-224	219.5 (23.5)
225-234	229.5 (24.5)
235-244	239.5 (25.5)
245-254	249.5 (26.5)
255-264	259.5 (27.5)
265-274	269.5 (28.5)
275-284	279.5 (29.5)
285-294	289.5 (30.5)
295-304	299.5 (31.5)
305-314	309.5 (32.5)
315-324	319.5 (33.5)
325-334	329.5 (34.5)
335-344	339.5 (35.5)
345-354	349.5 (36.5)
355-364	359.5 (37.5)
365-374	369.5 (38.5)
375-384	379.5 (39.5)
385-394	389.5 (40.5)
395-404	399.5 (41.5)
405-414	409.5 (42.5)
415-424	419.5 (43.5)
425-434	429.5 (44.5)
435-444	439.5 (45.5)
445-454	449.5 (46.5)
455-464	459.5 (47.5)
465-474	469.5 (48.5)
475-484	479.5 (49.5)
485-494	489.5 (50.5)
495-504	499.5 (51.5)
505-514	509.5 (52.5)
515-524	519.5 (53.5)
525-534	529.5 (54.5)
535-544	539.5 (55.5)
545-554	549.5 (56.5)
555-564	559.5 (57.5)
565-574	569.5 (58.5)
575-584	579.5 (59.5)
585-594	589.5 (60.5)
595-604	599.5 (61.5)
605-614	609.5 (62.5)
615-624	619.5 (63.5)
625-634	629.5 (64.5)
635-644	639.5 (65.5)
645-654	649.5 (66.5)
655-664	659.5 (67.5)
665-674	669.5 (68.5)
675-684	679.5 (69.5)
685-694	689.5 (70.5)
695-704	699.5 (71.5)
705-714	709.5 (72.5)
715-724	719.5 (73.5)
725-734	729.5 (74.5)
735-744	739.5 (75.5)
745-754	749.5 (76.5)
755-764	759.5 (77.5)
765-774	769.5 (78.5)
775-784	779.5 (79.5)
785-794	789.5 (80.5)
795-804	799.5 (81.5)
805-814	809.5 (82.5)
815-824	819.5 (83.5)
825-834	829.5 (84.5)
835-844	839.5 (85.5)
845-854	849.5 (86.5)
855-864	859.5 (87.5)
865-874	869.5 (88.5)
875-884	879.5 (89.5)
885-894	889.5 (90.5)
895-904	899.5 (91.5)
905-914	909.5 (92.5)
915-924	919.5 (93.5)
925-934	929.5 (94.5)
935-944	939.5 (95.5)
945-954	949.5 (96.5)
955-964	959.5 (97.5)
965-974	969.5 (98.5)
975-984	979.5 (99.5)
985-994	989.5 (100.5)
995-1004	999.5 (101.5)
1005-1014	1009.5 (102.5)
1015-1024	1019.5 (103.5)
1025-1034	1029.5 (104.5)
1035-1044	1039.5 (105.5)
1045-1054	1049.5 (106.5)
1055-1064	1059.5 (107.5)
1065-1074	1069.5 (108.5)
1075-1084	1079.5 (109.5)
1085-1094	1089.5 (110.5)
1095-1104	1099.5 (111.5)
1105-1114	1109.5 (112.5)
1115-1124	1119.5 (113.5)
1125-1134	

Gly  
65

Met Asn Thr Tyr Leu Arg  
1 5

Met Val Leu Ala Lys Ala Gln Leu Leu Ile Phe Trp Leu Val Ile Leu  
1 5 10 15

Asn Gln Leu Gln Ala Arg Tyr Phe  
20

Met Phe Leu Asn Leu Lys Phe Leu Leu Leu Leu His Phe Cys Glu Ser  
1 5 10 15

His Leu Lys Phe Phe Arg Glu Gly Ile Leu Ser Phe Val Gln Arg Cys  
20 25 30

Leu Tyr Phe Tyr  
35







<210> 4581  
 <211> 34  
 <212> PRT  
 <213> Homo sapiens

<400> 4581  
 Phe Leu Lys Ala Leu Gln Val Ile Phe Phe Leu Leu Phe Lys Asn Tyr  
   1                  5                  10                  15  
 Asn Phe Tyr Phe Leu Tyr Cys Ser Phe Lys Thr Ser Cys Tyr Ser Ile  
           20                  25                  30

Cys Arg

<210> 4582  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (24)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4582  
 Met Leu Ser Ile Asp Leu Leu Leu Phe Ser Leu Leu Phe Leu Leu Leu  
   1                  5                  10                  15  
 Cys Gly Tyr Phe Leu Leu Ile Xaa Arg Ile Leu Leu Val Asn Met Leu  
           20                  25                  30  
 His Ile His Ile Ile Trp Cys Pro Val Phe Pro Phe Thr Tyr Tyr Thr  
           35                  40                  45  
 Phe His Ile Ser Thr Leu Ser Asp Ile Ser Ala  
       50                  55

<210> 4583  
 <211> 12  
 <212> PRT  
 <213> Homo sapiens

<400> 4583  
 Met Phe Ser His Pro Pro Pro Gln Pro Leu Leu Asn  
   1                  5                  10

<210> 4584  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

<400> 4584



Met Phe Ile Met Ala Phe Ile Leu Leu Ile Ser Phe Tyr Met Leu Ile  
 1 5 10 15

Leu Ile Ser Ser Ser Met Ser Lys  
 20

<210> 4585  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 4585  
 Met Tyr Gln Thr Pro Met Glu Val Ala Val Tyr Gln Leu His Asn Phe  
 1 5 10 15

Ser Ile Ser Phe Phe Ser Ser Leu Leu Gly Gly Asp Val Val Ser Val  
 20 25 30

Lys Leu Asp Asn Ser Ala Ser Gly Ala Ser Val Val Ala Ile Asp Asn  
 35 40 45

Lys Ile Glu Gln Ala Met Asp Leu Val Lys Asn His Leu Met Tyr Ala  
 50 55 60

Val Arg Glu Glu Val Glu Ile Leu Lys Glu Gln Ile Arg Glu Leu Val  
 65 70 75 80

Glu Lys Asn Ser Gln Leu Glu Arg Glu Asn Thr Leu Leu Lys Thr Leu  
 85 90 95

Ala Ser Pro Glu Gln Leu Glu Lys Phe Gln Ser Cys Leu Ser Pro Glu  
 100 105 110

Glu Pro Ala Pro Glu Ser Pro Gln Val Pro Glu Ala Pro Gly Gly Ser  
 115 120 125

Ala Val  
 130

<210> 4586  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 4586  
 Met Tyr Gln Thr Pro Met Glu Val Ala Val Tyr Gln Leu His Asn Phe  
 1 5 10 15

Ser Ile Ser Phe Phe Ser Ser Leu Leu Gly Gly Asp Val Val Ser Val  
 20 25 30

Lys Leu Asp Asn Ser Ala Ser Gly Ala Ser Val Val Ala Ile Asp Asn  
 35 40 45

Lys Ile Glu Gln Ala Met Asp Leu Val Lys Asn His Leu Met Tyr Ala  
 50 55 60



Val Arg Glu Glu Val Glu Ile Leu Lys Glu Gln Ile Arg Glu Leu Val  
65 70 75 80

Glu Lys Asn Ser Gln Leu Glu Arg Glu Asn Thr Leu Leu Lys Thr Leu  
85 90 95

Ala Ser Pro Glu Gln Leu Glu Lys Phe Gln Ser Cys Leu Ser Pro Glu  
100 105 110

Glu Pro Ala Pro Glu Ser Pro Gln Val Pro Glu Ala Pro Gly Gly Ser  
115 120 125

Ala Val  
130

<210> 4587  
<211> 97  
<212> PRT  
<213> Homo sapiens

<400> 4587  
Glu Phe Gly Phe Phe Phe Ser Leu Phe Leu Val Ile Ser Leu Phe Val  
1 5 10 15

Trp Lys Glu Ser Tyr Phe Ser Leu Asp Ile Thr Pro Glu Phe Pro Ser  
20 25 30

Asp Ala Leu Leu Arg Val Arg Ala Val Ala Asp Ser Leu Lys Phe Ser  
35 40 45

Ser Ala Leu Pro Tyr Leu Pro Phe Ile Leu Gly Ile Gly Lys Cys Cys  
50 55 60

Lys Gly Pro Asp Gly Lys Tyr Phe Arg Leu Tyr Gly Leu Val Ser Val  
65 70 75 80

Ala Asn Ile Gln Leu Cys Gln Cys Thr Leu Lys Ala Ala Ile Asp Asn  
85 90 95

Met

<210> 4588  
<211> 30  
<212> PRT  
<213> Homo sapiens

<400> 4588  
Met Val Cys Cys Val Val Phe Phe Phe Phe Trp Lys Glu Ser Leu Leu  
1 5 10 15

Phe Ile Arg Phe Leu Lys Asp Ser Lys Thr Lys Lys Gly Leu  
20 25 30

<210> 4589



<211> 36  
<212> PRT  
<213> Homo sapiens

<400> 4589  
Met Arg Leu Lys Leu Leu Glu Tyr Arg Thr Ile Leu Leu Ile Val Phe  
1 5 10 15  
Leu His Ser Phe Ser Ala Trp Gln Arg Asp Gly Arg Gly Pro Asp Thr  
20 25 30  
Asp Tyr Leu Gly  
35

<210> 4590  
<211> 25  
<212> PRT  
<213> Homo sapiens

<400> 4590  
Met Ile His Leu Lys Ser Val Thr Ser Leu Met Leu Leu Ala Ile Asn  
1 5 10 15  
Leu Gly Asn Met Lys Gln Ser Cys Ser  
20 25

<210> 4591  
<211> 59  
<212> PRT  
<213> Homo sapiens

<400> 4591  
Glu Ile Leu Leu Leu Ser Phe Leu Phe Ile Tyr Leu Arg Phe Ser Leu  
1 5 10 15  
Ser Phe Ser Ser Asp Leu Ser Pro Ser Ile Cys Leu Ser Ser Phe Ile  
20 25 30  
Phe Leu Ser Ser Pro Phe Leu Pro Ala Ser Ala Thr Ser Leu Val Ser  
35 40 45  
Trp Leu Leu Thr Phe Leu Arg His Arg Leu Leu  
50 55

<210> 4592  
<211> 49  
<212> PRT  
<213> Homo sapiens

<400> 4592  
Met Leu Leu Arg Asp Ile Glu Val Tyr Phe Leu Gly Gln Val Gly Ile  
1 5 10 15  
Phe Tyr Pro Cys Ser Phe Phe Ile Leu Ala Thr His Ile Cys Ser Leu  
20 25 30



Ala His Pro Thr Ala Pro Pro Thr Arg Pro Arg Trp Ile Leu Pro Gln  
 35 40 45

Cys

<210> 4593  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 4593  
 Met Pro Thr Ser Gln Lys Gln Met Pro Leu Phe Leu Cys Gln Asn Leu  
 1 5 10 15  
 Met Val Leu Trp Leu Leu Leu Asn Pro Val Asn Leu Glu Pro Ile  
 20 25 30

<210> 4594  
 <211> 36  
 <212> PRT  
 <213> Homo sapiens

<400> 4594  
 Met His His Gln Ala Gly His Phe Lys Leu Ser Ser Arg Asn Glu Phe  
 1 5 10 15  
 Leu Cys Phe Leu Ala Leu Leu Phe Ala Trp Gly Trp Glu Arg Val Val  
 20 25 30  
 Ser Ser Asn Cys  
 35

<210> 4595  
 <211> 39  
 <212> PRT  
 <213> Homo sapiens

<400> 4595  
 Met Pro Ser Leu Leu His Ile Ile Val Arg Pro Phe Leu Leu Leu Trp  
 1 5 10 15  
 Ser Pro Thr Ile Ser Phe Val Leu Tyr Pro Gly Glu Arg Gly Arg Val  
 20 25 30  
 Asn Gly Thr Gly Trp Phe Leu  
 35

<210> 4596  
 <211> 4  
 <212> PRT  
 <213> Homo sapiens



<400> 4596  
Met Trp Arg Trp  
1

<210> 4597  
<211> 35  
<212> PRT  
<213> Homo sapiens

<400> 4597  
Met Ile Leu Ser Leu Val Leu Ser Tyr Asn Leu Phe Leu Val Gln Leu  
1 5 10 15  
Ile Leu Cys Thr Ile Thr Ala Glu Met Ser Asn Trp Asp Arg Leu Ala  
20 25 30  
Ser Lys Ala  
35

<210> 4598  
<211> 51  
<212> PRT  
<213> Homo sapiens

<400> 4598  
Met Glu Ser Ala Glu Val Leu Ala Leu Pro Gly Lys Ile Leu Ser Leu  
1 5 10 15  
Tyr Val Ile Val Leu Ser Ser Leu Phe Leu Leu Asn Ser Ile Pro Phe  
20 25 30  
Leu Val Leu Glu Pro Lys Ala Ile Glu Tyr Ala Lys Lys Lys Lys Lys  
35 40 45  
Gly Gly Arg  
50

<210> 4599  
<211> 48  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (36)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4599  
Met Phe Leu Leu Ser Leu Leu Leu Lys Met Ile His Phe Ile Ala Asn  
1 5 10 15  
Ser Phe Leu Ser Ser Ile Ser Ser Phe Leu Ser Val Cys His Ser Asp  
20 25 30



Leu Cys Tyr Xaa Ser Tyr Leu Val Ala Ile Leu Lys Val Phe Lys Met  
 35 40 45

<210> 4600  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 4600  
 Met Leu Arg Thr Asp Leu Ile Lys Leu Ser Trp Tyr Leu Arg His Phe  
 1 5 10 15  
 Leu Lys Gly Cys Ile  
 20

<210> 4601  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<400> 4601  
 Met Ile Lys Ala Val Leu Thr Phe Leu Lys Ile His Cys Leu Gly Trp  
 1 5 10 15  
 Ala Gly Asn Ser Phe Glu Val Thr Leu Ile Arg Leu Gln Cys  
 20 25 30

<210> 4602  
 <211> 46  
 <212> PRT  
 <213> Homo sapiens

<400> 4602  
 Met Ser Ile Ile Pro Cys Arg Pro Gln Pro Arg Ala Gly Arg Cys Tyr  
 1 5 10 15  
 Ser Leu Cys Phe Met Leu Leu Leu Trp Pro Leu Phe Leu Pro Ser Ser  
 20 25 30  
 Glu Leu Cys Arg Val Tyr Cys Arg Gln Ser Glu Val Ser Phe  
 35 40 45

<210> 4603  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

<400> 4603  
 Cys Thr Thr Val Val Leu Phe Leu Leu Ile Glu Leu Lys Gln Leu Tyr  
 1 5 10 15



Gly Ala Lys Val Thr Gly Tyr Ser  
20

<210> 4604  
<211> 45  
<212> PRT  
<213> Homo sapiens

<400> 4604  
Phe Asn Phe Asp Val Ile Leu Leu Leu Val Ile Phe Ala Phe Val Ser  
1 5 10 15  
Cys Thr Phe Val Ser Tyr Pro Ile Met Cys Ile Ile Tyr Ile Tyr Met  
20 25 30  
His Ile His Thr His Ile Tyr Ile Tyr Asn Arg Tyr Ile  
35 40 45

<210> 4605  
<211> 45  
<212> PRT  
<213> Homo sapiens

<400> 4605  
Phe Asn Phe Asp Val Ile Leu Leu Leu Val Ile Phe Ala Phe Val Ser  
1 5 10 15  
Cys Thr Phe Val Ser Tyr Pro Ile Met Cys Ile Ile Tyr Ile Tyr Met  
20 25 30  
His Ile His Thr His Ile Tyr Ile Tyr Asn Arg Tyr Ile  
35 40 45

<210> 4606  
<211> 38  
<212> PRT  
<213> Homo sapiens

<400> 4606  
Met Ala Arg Ala Asp Trp Val Leu Ser Leu Leu Leu Tyr Asn His Ile  
1 5 10 15  
Thr Ala Leu Pro Cys Ile Phe Ser Ser Lys Asn Gly Asp Tyr Leu Leu  
20 25 30  
Cys Gly Ser Val Cys Arg  
35

<210> 4607  
<211> 17  
<212> PRT  
<213> Homo sapiens



<400> 4607

Met Met Val Met Tyr Arg Trp Val Phe Gly Val Asp Val Leu Ser Val  
1 5 10 15

Cys

<210> 4608

<211> 44

<212> PRT

<213> Homo sapiens

<400> 4608

Met Val Leu Val Ser Ile Phe Cys Leu Phe Ala Cys Phe Gln Asn Ser  
1 5 10 15

Leu Ala Trp Tyr Cys Met Glu Ser Ser Ser Phe Ser Ser Cys Pro Leu  
20 25 30

Arg Ala Gly Leu Phe Pro Val Ser Ser Gln Arg Pro  
35 40

<210> 4609

<211> 27

<212> PRT

<213> Homo sapiens

<400> 4609

Glu Leu Gly Phe Leu Tyr Cys Phe Leu Cys Asn Met Ile Ala Glu Thr  
1 5 10 15

His Phe Lys Asn Ser Glu Ala Cys His Ser Cys  
20 25

<210> 4610

<211> 19

<212> PRT

<213> Homo sapiens

<400> 4610

Met Gln Ala Leu Gln Thr Ala Cys Phe Phe Phe Leu Leu Leu Ala Gln  
1 5 10 15

Pro Phe Gln

<210> 4611

<211> 41

<212> PRT

<213> Homo sapiens

<220>















Table 1. Demographic characteristics of the study population	
Age (years)	Mean (SD)
18-24	20.5 (2.5)
25-34	29.5 (4.5)
35-44	39.5 (5.5)
45-54	49.5 (6.5)
55-64	59.5 (7.5)
65-74	69.5 (8.5)
75-84	79.5 (9.5)
85-94	89.5 (10.5)
95-104	99.5 (11.5)
105-114	109.5 (12.5)
115-124	119.5 (13.5)
125-134	129.5 (14.5)
135-144	139.5 (15.5)
145-154	149.5 (16.5)
155-164	159.5 (17.5)
165-174	169.5 (18.5)
175-184	179.5 (19.5)
185-194	189.5 (20.5)
195-204	199.5 (21.5)
205-214	209.5 (22.5)
215-224	219.5 (23.5)
225-234	229.5 (24.5)
235-244	239.5 (25.5)
245-254	249.5 (26.5)
255-264	259.5 (27.5)
265-274	269.5 (28.5)
275-284	279.5 (29.5)
285-294	289.5 (30.5)
295-304	299.5 (31.5)
305-314	309.5 (32.5)
315-324	319.5 (33.5)
325-334	329.5 (34.5)
335-344	339.5 (35.5)
345-354	349.5 (36.5)
355-364	359.5 (37.5)
365-374	369.5 (38.5)
375-384	379.5 (39.5)
385-394	389.5 (40.5)
395-404	399.5 (41.5)
405-414	409.5 (42.5)
415-424	419.5 (43.5)
425-434	429.5 (44.5)
435-444	439.5 (45.5)
445-454	449.5 (46.5)
455-464	459.5 (47.5)
465-474	469.5 (48.5)
475-484	479.5 (49.5)
485-494	489.5 (50.5)
495-504	499.5 (51.5)
505-514	509.5 (52.5)
515-524	519.5 (53.5)
525-534	529.5 (54.5)
535-544	539.5 (55.5)
545-554	549.5 (56.5)
555-564	559.5 (57.5)
565-574	569.5 (58.5)
575-584	579.5 (59.5)
585-594	589.5 (60.5)
595-604	599.5 (61.5)
605-614	609.5 (62.5)
615-624	619.5 (63.5)
625-634	629.5 (64.5)
635-644	639.5 (65.5)
645-654	649.5 (66.5)
655-664	659.5 (67.5)
665-674	669.5 (68.5)
675-684	679.5 (69.5)
685-694	689.5 (70.5)
695-704	699.5 (71.5)
705-714	709.5 (72.5)
715-724	719.5 (73.5)
725-734	729.5 (74.5)
735-744	739.5 (75.5)
745-754	749.5 (76.5)
755-764	759.5 (77.5)
765-774	769.5 (78.5)
775-784	779.5 (79.5)
785-794	789.5 (80.5)
795-804	799.5 (81.5)
805-814	809.5 (82.5)
815-824	819.5 (83.5)
825-834	829.5 (84.5)
835-844	839.5 (85.5)
845-854	849.5 (86.5)
855-864	859.5 (87.5)
865-874	869.5 (88.5)
875-884	879.5 (89.5)
885-894	889.5 (90.5)
895-904	899.5 (91.5)
905-914	909.5 (92.5)
915-924	919.5 (93.5)
925-934	929.5 (94.5)
935-944	939.5 (95.5)
945-954	949.5 (96.5)
955-964	959.5 (97.5)
965-974	969.5 (98.5)
975-984	979.5 (99.5)
985-994	989.5 (100.5)
995-1004	999.5 (101.5)
1005-1014	1009.5 (102.5)
1015-1024	1019.5 (103.5)
1025-1034	1029.5 (104.5)
1035-1044	1039.5 (105.5)
1045-1054	1049.5 (106.5)
1055-1064	1059.5 (107.5)
1065-1074	1069.5 (108.5)
1075-1084	1079.5 (109.5)
1085-1094	1089.5 (110.5)
1095-1104	1099.5 (111.5)
1105-1114	1109.5 (112.5)
1115-1124	1119.5 (113.5)
1125-1134	

Leu Tyr Leu Phe Leu Phe Cys Glu Asn Cys Leu Val Val Ser Cys  
20 25 30

<211> 31

<213> Homo sapiens

Met His Phe Phe Leu Pro Lys Gln Val Ser Phe Pro Leu Ser Leu Ile  
1 5 10 15

Thr Leu Leu Trp Pro Ser Leu Ile Leu Gln Lys Ile Ser Arg Leu  
20 25 30

<211> 57

<213> Homo sapiens

Met Thr Cys Ser Arg Ser Ser Ile Phe Leu Thr Leu Leu Leu Leu Gly  
1 5 10 15

His Arg Ala Ile Phe Ser Asn Met Pro Glu Lys Leu Arg Ser Leu Ile  
20 25 30

Thr Asp Asn Leu Gln Leu Phe Thr Ser Lys Ser Phe Gly Gln Ile Met  
35 40 45

Pro Val Lys Glu Cys Lys Phe Tyr Lys  
50 55

<211> 44

<213> Homo sapiens

Met Leu Leu Ala Pro Ala Val Gly Gln Leu Leu Tyr Ile Tyr Trp Thr  
1 5 10 15

Leu Tyr Phe Ser Arg Ser Phe Leu Arg Trp Val Gly Phe Val Ser Thr  
20 25 30

Leu Gln Val Arg Lys Val Lys Leu Arg Glu Leu Lys  
35 40

2131











15



Ala Phe Leu Ala Ala Ala Leu Ala Gln Gly Leu Cys Glu Val Leu Leu  
1 5 10 15

Val Val Thr Lys Glu Val Glu Glu Lys Gly Ser Trp Leu Arg Thr Asp  
20 25 30

<210> 4636  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 4636  
Gly Lys Cys Leu Ile Asn Leu Val Ile Gly Trp Val Lys Tyr Met Gly  
1 5 10 15

Glu Phe Tyr Met  
20

<210> 4637  
<211> 67  
<212> PRT  
<213> Homo sapiens

<400> 4637  
Asp Thr Trp Phe Val Ser Thr Phe Trp Leu Leu Leu Thr Val Leu Leu  
1 5 10 15

Cys Thr Phe Leu Ser Lys Ser Leu Phe Gly Asn Leu Phe Ser Asn Ser  
20 25 30

Leu Lys Tyr Leu Gly Met Glu Leu Leu Ser Phe Met Ile Ile Gln Ser  
35 40 45

Leu Pro Ser Arg Gly Thr Pro Ala Thr Val Leu Phe Tyr Ile Leu Ile  
50 55 60

Ser Ser Val  
65

<210> 4638  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 4638  
Met Gln Phe Thr Asp Ser Arg Gln Cys Cys Leu Leu Phe Thr Leu Ile  
1 5 10 15

Leu Phe Thr Val Leu Ser Gln Phe Tyr Phe Leu Glu Glu Trp Tyr Ser  
20 25 30

Val Leu



<210> 4639  
 <211> 29  
 <212> PRT  
 <213> Homo sapiens

<400> 4639  
 Met Val Thr Ile Ile Ile Leu Gln Pro Ser Ser Phe Pro Leu Pro Leu  
 1 5 10 15  
 Arg Leu Asn Cys Tyr Asn Ala Asp Tyr Leu Tyr Ser Ser  
 20 25

<210> 4640  
 <211> 3  
 <212> PRT  
 <213> Homo sapiens

<400> 4640  
 Thr Val Trp  
 1

<210> 4641  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 4641  
 Met Ser Gln Cys Tyr Arg Asp Phe Val Tyr Gly Gln Phe Trp Gly Gln  
 1 5 10 15  
 Phe Met Ala Arg Phe Trp Gly Ala Cys Ser Gln His Gln Glu Met Cys  
 20 25 30

<210> 4642  
 <211> 3  
 <212> PRT  
 <213> Homo sapiens

<400> 4642  
 Met Phe Ser  
 1

<210> 4643  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens



[illegible]

Arg Leu Asp Leu Gly Lys Ser Pro Gly Trp Leu Glu Gly Leu Arg Phe  
20 25 30

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<210> 4644
<211> 36
<212> PRT
<213> Homo sapiens
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<400> 4644
Met Ser Ser Val Asp Phe His Val Leu Ser Ser Pro Phe Asp Ile Arg
  1             5             10             15
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Gly Leu Lys Thr Pro Pro Leu Asp His Ala Asn Thr Ala Ile Phe Cys  
20 25 30

Ala Trp Val Pro  
35

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<210> 4645
<211> 39
<212> PRT
<213> Homo sapiens
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<400> 4645  
Met Cys Ile Leu Ile Pro Phe Ala Ser Val Leu Leu Arg Ile Phe Ala  
1 5 10 15

Ser Gly Ile Leu Val Cys Ser Phe Leu Val Ser Leu Ser Gly Phe Gly  
20 25 30

Val Arg Glu Met Gln Ala Ser  
35

```
<210> 4646
<211> 16
<212> PRT
<213> Homo sapiens
```

```
<400> 4646
Met Ile Ile Ile Ala Lys Val Val Leu Phe Phe Asn Ser Ser Ala Ser
  1             5             10             15
```







<210> 4651  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 4651  
 Phe Leu Phe Val Pro Asn Val Phe Ser Ser Phe Lys Asn Gly Ser His  
 1 5 10 15  
 Pro Thr Arg Leu Pro Pro Tyr Gln Asp  
 20 25

<210> 4652  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (8)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4652  
 Met Lys Leu Val Ile Met Tyr Xaa Ile Leu Leu Ala Val Ser Ser Leu  
 1 5 10 15  
 Thr Val Ile Lys Val Ile  
 20

<210> 4653  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 4653  
 Met Arg Ile Leu His Phe Gln Leu Thr Cys Cys Tyr Ile Pro Thr Ile  
 1 5 10 15  
 Ile Arg Pro Trp Arg Pro Val Ala Trp Phe Pro Leu Ser Leu Leu Cys  
 20 25 30  
 Phe Phe Leu Trp His Gly  
 35

<210> 4654  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 4654  
 Met Cys Met His Thr Ser Ser Leu Leu Phe Leu Leu Val Leu Leu Ser  
 1 5 10 15  
 Asp Thr Tyr Glu Lys Asp His Phe Pro Ser Leu Phe Pro Phe Val Gly  
 20 25 30



Table 1. Demographic characteristics of the study population	
Age (years)	Mean (SD)
Male	55.2 (10.5)
Female	56.8 (11.2)
Marital status	
Married	78.5%
Single	21.5%
Education level	
High school or above	65.2%
Below high school	34.8%
Occupation	
White collar	45.1%
Blue collar	54.9%
Income (USD/month)	
< 1000	12.3%
1000-2000	35.7%
2000-3000	28.9%
> 3000	23.1%
Health insurance	
Yes	89.4%
No	10.6%
Comorbidities	
Hypertension	42.1%
Diabetes	18.5%
Cholesterol	31.2%
Smoking status	
Current smoker	15.3%
Former smoker	22.7%
Non-smoker	62.0%
Alcohol consumption	
Regular	8.9%
Occasional	25.4%
Never	65.7%

```
<210> 4656
<211> 8
<212> PRT
<213> Homo sapiens
```

```
<210> 4657
<211> 13
<212> PRT
<213> Homo sapiens
```

```
<210> 4658
<211> 49
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids
```

2140



Ile His Arg Ser Ala Leu Leu Phe Leu Leu Pro Leu Ser Val Phe Ser  
 35 40 45

Cys

<210> 4659  
 <211> 29  
 <212> PRT  
 <213> Homo sapiens

<400> 4659  
 Ile Lys Ile Val Leu Leu Phe Ser Cys Leu Phe Leu Phe Leu Leu Phe  
 1 5 10 15  
 Val Phe Leu Thr Ser Leu Tyr Trp Glu Val Thr Pro Val  
 20 25

<210> 4660  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens

<400> 4660  
 Met Cys Leu Tyr Gln Phe Ile Phe Leu Phe Tyr Trp Leu Val Val Phe  
 1 5 10 15  
 Tyr Leu Glu Cys Thr Thr Val Tyr Pro Phe Thr Ser  
 20 25

<210> 4661  
 <211> 6  
 <212> PRT  
 <213> Homo sapiens

<400> 4661  
 Phe Leu Ser Ser Leu Ser  
 1 5

<210> 4662  
 <211> 57  
 <212> PRT  
 <213> Homo sapiens

<400> 4662  
 Met Glu Phe Leu His Asp Val Gly Val Asp Ala Ile Ala Phe Ser Leu  
 1 5 10 15  
 Leu Val Phe Leu Leu Thr Val Arg Pro Leu Cys Cys Arg Ser Ala Gly  
 20 25 30  
 Val Cys Cys Gly Ser Thr Pro Asp Pro Val Ser Leu Ser Ile Thr Ser  
 35 40 45



Gly Gly Cys Arg Thr Ala Lys Thr Asp  
50 55

<210> 4663  
<211> 31  
<212> PRT  
<213> Homo sapiens

<400> 4663  
Met Gly Phe Tyr Leu Arg Val Leu Arg Leu Val Tyr Val Phe Gln Glu  
1 5 10 15  
Leu Leu Gly His Cys Gly Ser Ala Ala Pro Gly Thr Ser Cys Ala  
20 25 30

<210> 4664  
<211> 69  
<212> PRT  
<213> Homo sapiens

<400> 4664  
Met Gly Arg Trp Pro Gly Thr Ala Gly Ser Leu Thr Leu Thr Trp Leu  
1 5 10 15  
Arg Val Glu Ile Trp Leu Val Pro Trp Ser Gly Thr Cys His Ser Pro  
20 25 30  
Asn Pro Lys Gln Ser Arg Val Trp Ala Gln Asp Cys Pro Leu Pro Phe  
35 40 45  
Glu Thr Pro Ser Leu Val Pro Ala Ser Lys Thr Asn Arg Glu Ala Thr  
50 55 60  
Leu Val Ala Gly Ser  
65

<210> 4665  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 4665  
Met Gln Ile Asn Asp Tyr Phe Leu Ser  
1 5

<210> 4666  
<211> 40  
<212> PRT  
<213> Homo sapiens

<400> 4666  
Gly Gly Ile Tyr Lys Phe Thr Leu Thr Val Cys Ala Ala His Ile Arg



4667 4668 4669 4670

1

5

10

15

Phe Leu Val Leu Gly Leu Phe Leu Tyr Ser Leu His Gly Asp Trp Gln  
20 25 30

His Gln His His Met Ser Thr Thr  
35 40

<210> 4667

<211> 20

<212> PRT

<213> Homo sapiens

<400> 4667

Met Ile Glu Asn Pro Gly Arg Leu Phe Leu Ser Ser Val Leu Phe Cys  
1 5 10 15

Phe Phe Ala Leu  
20

<210> 4668

<211> 34

<212> PRT

<213> Homo sapiens

<400> 4668

Met Leu Leu Leu Leu Phe Leu Phe Trp Ser Lys Gly Ala Ala Glu Gly  
1 5 10 15

Glu Pro Gly Pro Val Pro Ala Pro Ala Gly Phe Ser Glu Thr Gln Arg  
20 25 30

Trp Arg

<210> 4669

<211> 36

<212> PRT

<213> Homo sapiens

<400> 4669

Met Gly Gln Met Leu Leu Ser Val Leu Leu Leu Leu Gln Trp Leu Cys  
1 5 10 15

Ser His Ser Ala Ser Asn Leu Ser Ser Phe Ser Ser Val Phe Thr His  
20 25 30

Leu Gly Arg Trp  
35

<210> 4670

<211> 35

<212> PRT



[illegible]

Met Val Cys Leu Leu Leu Arg Thr Leu Cys Pro Leu Cys Ser Arg Gly  
1 5 10 15

Arg Asp Gln  
35

<213> Homo sapiens

Met Phe Glu Val Phe His Phe Leu Ala Phe Val Ser Asn Met Val Trp  
1 5 10 15

Val Gly Gly Ala Trp Trp Glu Val Thr Gly Leu Tyr Gly Trp Ile Leu  
35 40 45

Met Asn His Leu Ile Pro Leu Pro Leu Val Leu Ser Leu Pro  
50 55 60

<213> Homo sapiens

Met Ile Phe Leu Leu Phe Cys Ser Thr Phe Pro Leu Phe Lys Thr Ser  
1 5 10 15

Lys Gln Glu Gln Ile Thr Gln Lys His  
35 40

<213> Homo sapiens

Gln His Cys Cys Leu Ser Ser Ala Ser Cys Leu Gly Ser Pro Leu Val  
1 5 10 15

2144



<210> 4674  
 <211> 48  
 <212> PRT  
 <213> Homo sapiens

<400> 4674  
 Met Ile Gln Thr Pro Pro Thr Arg Pro His Leu Leu Thr Leu Gly Trp  
           1                          5                          10                          15  
 Ser Thr Cys Phe Leu Val Trp Ser His Glu Ile Arg Thr Gly Ala His  
                           20                          25                          30  
 Ile Gln Thr Met Ser His Thr Ile Gln Arg Ile Ile Ala Met Cys Lys  
                           35                          40                          45

<210> 4675  
 <211> 37  
 <212> PRT  
 <213> Homo sapiens

<400> 4675  
 Met Glu Trp Leu Val Ser Pro Ser His Phe Leu Phe Leu Thr Tyr Phe  
           1                          5                          10                          15  
 Ser Leu Leu Val Ser Leu Asp Gly Glu Val Leu Phe Met Ile Arg Lys  
                           20                          25                          30  
 Glu Gly Ile Ser Tyr  
                           35

<210> 4676  
 <211> 14  
 <212> PRT  
 <213> Homo sapiens

<400> 4676  
 Met Arg Gly Val Glu Phe Cys Leu Val Phe Trp Pro Cys Trp  
           1                          5                          10

<210> 4677  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 4677  
 Met Val Gly Ile Trp Val Cys Val Cys His Leu Ser Val Ser Gln Ala  
           1                          5                          10                          15



Leu Lys Asn Ile Ser Tyr Ser Trp His Ser Ser Val His Phe Gly Lys  
 20 25 30

<210> 4678  
 <211> 43  
 <212> PRT  
 <213> Homo sapiens

<400> 4678  
 Met Pro Phe Leu Leu Leu Leu His Ala Ile Glu His Ser Leu Ser Ser  
 1 5 10 15  
 His Arg Ile Gln Phe Ser His Leu Arg Lys Ala Phe Pro Asp Ser Asn  
 20 25 30  
 Arg Gln Val Met His Leu Phe Pro Val Leu Thr  
 35 40

<210> 4679  
 <211> 35  
 <212> PRT  
 <213> Homo sapiens

<400> 4679  
 Met Leu Ser Tyr Lys Thr Ser Ile Phe Cys Leu Phe Leu Phe Phe Pro  
 1 5 10 15  
 Pro Phe Leu Thr Arg Gly Glu Lys Lys Thr Glu Gly Lys Lys Gly Gly  
 20 25 30  
 Asn Glu Ser  
 35

<210> 4680  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 4680  
 Met Cys Val Cys Val Cys Met Tyr Met His Val Phe Met Cys Phe Leu  
 1 5 10 15  
 Gly Leu Ile Ser Leu Lys  
 20

<210> 4681  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens



<400> 4681

Met Leu Ala Leu Lys Leu Val Leu Thr Ala Phe Ser Leu Val Gly Cys  
1 5 10 15

Leu Leu Glu Ser Pro Ile Gly Thr Ala Arg Ala Ile Thr Ser Leu  
20 25 30

<210> 4682

<211> 24

<212> PRT

<213> Homo sapiens

<400> 4682

Met Val Tyr Met Pro Ala Cys Ala Val Val Val Ser Gly Ile Leu Glu  
1 5 10 15

Leu Ala Leu Ser Ala Ser Leu Leu  
20

<210> 4683

<211> 31

<212> PRT

<213> Homo sapiens

<400> 4683

Met Tyr Cys Leu Cys Pro Phe Leu Leu Pro Ser Ser Asn Pro Leu Tyr  
1 5 10 15

Ser Tyr Cys Gly Leu Cys Ser Thr Val Val Tyr Pro Ser Thr Arg  
20 25 30

<210> 4684

<211> 16

<212> PRT

<213> Homo sapiens

<400> 4684

Met Asn Ser Met Asn Tyr Leu Phe Ile Phe Leu Val Ser Leu Glu Ala  
1 5 10 15

<210> 4685

<211> 35

<212> PRT

<213> Homo sapiens

<400> 4685

Met Val Leu His Leu His Leu Gln Leu Cys Leu Val Ser Val Cys Lys  
1 5 10 15

Ser Lys Ser Leu Val Gln Pro Phe Gln Ala Thr Trp Pro Lys Leu Thr



30

<400> 4686															
Met 1	Glu	Leu	Leu	Pro 5	Thr	His	Ala	Phe	Ser 10	Thr	Leu	Phe	Pro	Val 15	Leu
Gln	Asp	Asn	Leu 20	Glu	Val	Tyr	Leu	Gly 25	Leu	Gln	Gln	Phe	Ile 30	Val	Thr
Ser	Gly	Ser 35	Gly	His	Arg	Leu	Asn 40	Ile	Thr	Ala	Glu	Asn 45	Asp	Cys	Arg
Arg	Leu 50	His	Cys	Ser	Leu	Arg 55	Asp	Leu	Ser	Ser	Leu 60	Leu	Gln	Ala	Val
Gly 65	Arg	Leu	Ala	Glu	Tyr 70	Phe	Ile	Gly	Asp	Val 75	Phe	Ala	Ala	Arg	Phe 80
Asn	Asp	Ala	Leu	Thr 85	Val	Val	Glu	Arg	Leu 90	Val	Lys	Val	Thr	Leu 95	Tyr
Gly	Ser	Gln	Ile 100	Lys	Leu	Tyr	Asn	Ile 105	Glu	Thr	Ala	Val	Pro 110	Ser	Val
Leu	Lys	Pro 115	Asp	Leu	Ile	Asp	Val 120	His	Ala	Gln	Ser	Leu 125	Ala	Ala	Leu
Gln	Ala 130	Tyr	Ser	His	Trp	Leu 135	Ala	Gln	Tyr	Cys	Ser 140	Glu	Val	His	Arg
Gln 145	Asn	Thr	Gln	Gln	Phe 150	Val	Thr	Leu	Ile	Ser 155	Thr	Thr	Met	Asp	Ala 160
Ile	Thr	Pro	Leu	Ile 165	Ser	Thr	Lys	Val	Gln 170	Asp	Lys	Leu	Leu	Leu 175	Ser
Ala	Cys	His	Leu 180	Leu	Val	Ser	Leu	Ala 185	Thr	Thr	Val	Arg	Pro 190	Val	Phe
Leu	Ile	Ser 195	Ile	Pro	Ala	Val	Gln 200	Lys	Val	Phe	Asn 205	Arg	Ile	Thr	Asp
Ala 210	Ser	Ala	Leu	Arg	Leu	Val 215	Asp	Lys	Ala	Gln	Val 220	Leu	Val	Cys	Arg
Ala 225	Leu	Ser	Asn	Ile	Leu 230	Leu	Leu	Pro	Trp	Pro 235	Asn	Leu	Pro	Glu	Asn 240
Glu	Gln	Gln	Trp	Pro 245	Val	Arg	Ser	Ile	Asn 250	His	Ala	Ser	Leu	Ile 255	Ser



Ala Leu Ser Arg Asp Tyr Arg Asn Leu Lys Pro Ser Ala Val Ala Pro  
260 265 270

Gln Arg Lys Met Pro Leu Asp Asp Thr Lys Leu Ile Ile His Gln Thr  
275 280 285

Leu Ser Val Leu Glu Asp Ile Val Glu Asn Ile Ser Gly Glu Ser Thr  
290 295 300

Lys Ser Arg Gln Ile Cys Tyr Gln Ser Leu Gln Glu Ser Val Gln Val  
305 310 315 320

Ser Leu Ala Leu Phe Pro Ala Phe Ile His Gln Ser Asp Val Thr Asp  
325 330 335

Glu Met Leu Ser Phe Phe Leu Thr Leu Phe Arg Gly Leu Arg Val Gln  
340 345 350

Met Gly Val Pro Phe Thr Glu Gln Ile Ile Gln Thr Phe Leu Asn Met  
355 360 365

Phe Thr Arg Glu Gln Leu Ala Glu Ser Ile Leu His Glu Gly Ser Thr  
370 375 380

Gly Cys Arg Val Val Glu Lys Phe Leu Lys Ile Leu Gln Val Val Val  
385 390 395 400

Gln Glu Pro Gly Gln Val Phe Lys Pro Phe Leu Pro Ser Ile Ile Ala  
405 410 415

Leu Cys Met Glu Gln Val Tyr Pro Ile Ile Ala Glu Arg Pro Ser Pro  
420 425 430

Asp Val Lys Ala Glu Leu Phe Glu Leu Leu Phe Arg Thr Leu His His  
435 440 445

Asn Trp Arg Tyr Phe Phe Lys Ser Thr Val Leu Ala Ser Val Gln Arg  
450 455 460

Gly Ile Ala Glu Glu Gln Met Glu Asn Glu Pro Gln Phe Ser Ala Ile  
465 470 475 480

Met Gln Ala Phe Gly Gln Ser Phe Leu Gln Pro Asp Ile His Leu Phe  
485 490 495

Lys Gln Asn Leu Phe Tyr Leu Glu Thr Leu Asn Thr Lys Gln Lys Leu  
500 505 510

Tyr His Lys Lys Ile Phe Arg Thr Ala Met Leu Phe Gln Phe Val Asn  
515 520 525

Val Leu Leu Gln Val Leu Val His Lys Ser His Asp Leu Leu Gln Glu  
530 535 540

Glu Ile Gly Ile Ala Ile Tyr Asn Met Ala Ser Val Asp Phe Asp Gly  
545 550 555 560

Phe Phe Ala Ala Phe Leu Pro Glu Phe Leu Thr Ser Cys Asp Gly Val  
565 570 575

Asp Ala Asn Gln Lys Ser Val Leu Gly Arg Asn Phe Lys Met Asp Arg



590

Arg Tyr Tyr Arg Leu Cys Asn Asp Ser Leu Pro Pro Gly Thr Val Lys  
610 615 620

```
<210> 4687
<211> 35
<212> PRT
<213> Homo sapiens
```

```

<400> 4687
Met  Pro  Phe  Val  Ala  Trp  Phe  Cys  Phe  Cys  Val  Phe  Ser  Thr  Ile  His
  1          5          10          15
.
Phe  Ser  Ile  Leu  Ala  Ser  Arg  Lys  Glu  Asn  Gln  Pro  Ser  Arg  Leu  Ala
      20          25          30
Arg  Leu  Lys
      35

```

```
<210> 4688
<211> 12
<212> PRT
<213> Homo sapiens
```

<400> 4688  
Trp Tyr Ser Phe Cys Leu Val Leu Arg Val Ser Lys  
1 5 10

```
<210> 4689
<211> 767
<212> PRT
<213> Homo sapiens
```

```

<400> 4689
Met  Lys  Gly  Cys  Leu  Ser  Cys  Ser  Tyr  Ile  Glu  Lys  Phe  Thr  Asp  Phe
  1          5          10          15

Leu  Arg  Leu  Phe  Val  Ser  Val  His  Leu  Arg  Arg  Ile  Glu  Ser  Tyr  Ser
          20          25          30

Gln  Phe  Pro  Val  Val  Glu  Phe  Leu  Thr  Leu  Leu  Phe  Lys  Tyr  Thr  Phe
          35          40          45

His  Gln  Pro  Thr  His  Glu  Gly  Tyr  Phe  Ser  Cys  Leu  Asp  Ile  Trp  Thr
          50          55          60

Leu  Phe  Leu  Asp  Tyr  Leu  Thr  Ser  Lys  Ile  Lys  Ser  Arg  Leu  Gly  Asp
  65          70          75          80

```







Ser	Arg	Asp	Tyr	Arg	Asn	Leu	Lys	Pro	Ser	Ala	Val	Ala	Pro	Gln	Arg	
				405					410					415		
Lys	Met	Pro	Leu	Asp	Asp	Thr	Lys	Leu	Ile	Ile	His	Gln	Thr	Leu	Ser	
				420					425					430		
Val	Leu	Glu	Asp	Ile	Val	Glu	Asn	Ile	Ser	Gly	Glu	Ser	Thr	Lys	Ser	
				435					440					445		
Arg	Gln	Ile	Cys	Tyr	Gln	Ser	Leu	Gln	Glu	Ser	Val	Gln	Val	Ser	Leu	
				450					455					460		
Ala	Leu	Phe	Pro	Ala	Phe	Ile	His	Gln	Ser	Asp	Val	Thr	Asp	Glu	Met	
				465					470					475		
Leu	Ser	Phe	Phe	Leu	Thr	Leu	Phe	Arg	Gly	Leu	Arg	Val	Gln	Met	Gly	
				485					490					495		
Val	Pro	Phe	Thr	Glu	Gln	Ile	Ile	Gln	Thr	Phe	Leu	Asn	Met	Phe	Thr	
				500					505					510		
Arg	Glu	Gln	Leu	Ala	Glu	Ser	Ile	Leu	His	Glu	Gly	Ser	Thr	Gly	Cys	
				515					520					525		
Arg	Val	Val	Glu	Lys	Phe	Leu	Lys	Ile	Leu	Gln	Val	Val	Val	Gln	Glu	
				530					535					540		
Pro	Gly	Gln	Val	Phe	Lys	Pro	Phe	Leu	Pro	Ser	Ile	Ile	Ala	Leu	Cys	
				545					550					555		
Met	Glu	Gln	Val	Tyr	Pro	Ile	Ile	Ala	Glu	Arg	Pro	Ser	Pro	Asp	Val	
				565					570					575		
Lys	Ala	Glu	Leu	Phe	Glu	Leu	Leu	Phe	Arg	Thr	Leu	His	His	Asn	Trp	
				580					585					590		
Arg	Tyr	Phe	Phe	Lys	Ser	Thr	Val	Leu	Ala	Ser	Val	Gln	Arg	Gly	Ile	
				595					600					605		
Ala	Glu	Glu	Gln	Met	Glu	Asn	Glu	Pro	Gln	Phe	Ser	Ala	Ile	Met	Gln	
				610					615					620		
Ala	Phe	Gly	Gln	Ser	Phe	Leu	Gln	Pro	Asp	Ile	His	Leu	Phe	Lys	Gln	
				625					630					635		
Asn	Leu	Phe	Tyr	Leu	Glu	Thr	Leu	Asn	Thr	Lys	Gln	Lys	Leu	Tyr	His	
				645					650					655		
Lys	Lys	Ile	Phe	Arg	Thr	Ala	Met	Leu	Phe	Gln	Phe	Val	Asn	Val	Leu	
				660					665					670		
Leu	Gln	Val	Leu	Val	His	Lys	Ser	His	Asp	Leu	Leu	Gln	Glu	Glu	Ile	
				675					680					685		
Gly	Ile	Ala	Ile	Tyr	Asn	Met	Ala	Ser	Val	Asp	Phe	Asp	Gly	Phe	Phe	
				690					695					700		
Ala	Ala	Phe	Leu	Pro	Glu	Phe	Leu	Thr	Ser	Cys	Asp	Gly	Val	Asp	Ala	
				705					710					715		
Asn	Gln	Lys	Ser	Val	Leu	Gly	Arg	Asn	Phe	Lys	Met	Asp	Arg	Asp	Leu	



735

Tyr Arg Leu Cys Asn Asp Ser Leu Pro Pro Gly Thr Val Lys Leu  
755 760 765

```
<210> 4690
<211> 35
<212> PRT
<213> Homo sapiens
```

```

<400> 4690
Met  Pro  Phe  Val  Ala  Trp  Phe  Cys  Phe  Cys  Val  Phe  Ser  Thr  Ile  His
  1              5              10              15

Phe  Ser  Ile  Leu  Ala  Ser  Arg  Lys  Glu  Asn  Gln  Pro  Ser  Arg  Leu  Ala
      20              25              30

Arg  Leu  Lys
      35

```

```
<210> 4691
<211> 35
<212> PRT
<213> Homo sapiens
```

```

<400> 4691
Met  Pro  Phe  Val  Ala  Trp  Phe  Cys  Phe  Cys  Val  Phe  Ser  Thr  Ile  His
  1              5              10              15

Phe  Ser  Ile  Leu  Ala  Ser  Arg  Lys  Glu  Asn  Gln  Pro  Ser  Arg  Leu  Ala
      20              25              30

Arg  Leu  Lys
      35

```

```
<210> 4692
<211> 62
<212> PRT
<213> Homo sapiens
```

```

<400> 4692
Met  Pro  Leu  Leu  Gln  Leu  Phe  Leu  Phe  Tyr  Tyr  Phe  Leu  Pro  Ser  Tyr
  1          5          10          15

Leu  Pro  Ser  Leu  Pro  Pro  Glu  Thr  His  Thr  Phe  Leu  Phe  Phe  Pro  Leu
      20          25          30

Thr  Ile  Pro  Gly  Ile  Phe  Ser  Arg  Thr  Thr  Phe  Leu  Glu  Val  Leu  Leu
      35          40          45

Leu  Leu  Ile  Leu  Lys  Phe  Ala  Val  Pro  Trp  Leu  Phe  Ser  Phe
  50          55          60

```



<210> 4693  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens

<400> 4693  
 Met Ser Arg Leu Arg Glu Tyr Leu Ile Phe Leu Leu Phe Phe Ser Ser  
           1                  5                  10                  15  
 Leu Ala Phe Asn Val Glu Thr Pro Phe Thr Ser His  
                   20                  25

<210> 4694  
 <211> 48  
 <212> PRT  
 <213> Homo sapiens

<400> 4694  
 Met Leu Pro Leu Ala Thr Ala Lys Gln Cys Gly Ile Ala Gly Leu Glu  
           1                  5                  10                  15  
 Cys Leu Leu Ile Phe Leu Leu Gly Phe His Ile Gln Phe Pro Leu Arg  
                   20                  25                  30  
 Gly Ile Thr Trp Ile Ile Ile Gly Thr Leu Glu Leu Met Ala Ser Met  
           35                  40                  45

<210> 4695  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<400> 4695  
 Met Ser Cys Phe Tyr Ile Leu Lys Val Ile Leu His Phe Leu Val Leu  
           1                  5                  10                  15  
 Asn Tyr Ser Ile Pro Ile Lys Ile Cys Lys Ile Leu Lys Thr  
                   20                  25                  30

<210> 4696  
 <211> 47  
 <212> PRT  
 <213> Homo sapiens

<400> 4696  
 Met Ile Phe Lys Leu Cys Lys Phe Asp Ser Ile Leu Leu Leu Gly Phe  
           1                  5                  10                  15  
 Tyr Leu Ile Leu Val Val Cys Phe Ser Phe Ala Glu Val Ser Asn Cys



30

```
<210> 4697
<211> 32
<212> PRT
<213> Homo sapiens
```

Phe Ser Pro Cys Ile Ser Ile Pro Trp Ala Pro Pro Val Val Pro Val  
20 25 30

```
<210> 4698
<211> 116
<212> PRT
<213> Homo sapiens
```

<400> 4698  
Ser Lys Asn Ile Phe His Ala Ala Arg Thr Pro Ala Thr Leu Phe Val  
1 5 10 15

Val Ile Phe Ile Thr Tyr Val Ile Ala Gly Val Thr Gly Phe Ile Gly  
20 25 30

Leu Asp Ile Ile Ala Ser Leu Cys Asn Met Ile Met Gly Leu Thr Leu  
35 40 45

Ile Thr Leu Cys Thr Trp Ala Tyr Ile Arg Tyr Ser Gly Glu Tyr Arg  
50 55 60

Glu Leu Gly Ala Val Ile Asp Gln Val Ala Ala Ala Leu Trp Asp Gln  
65 70 75 80

Ala Leu Tyr Lys Leu Tyr Ser Ala Ala Ala Thr His Arg His Leu Tyr  
85 90 95

His Gln Ala Phe Pro Thr Pro Lys Ser Glu Ser Thr Glu Gln Ser Glu  
100 105 110

Lys Lys Lys Met  
115

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<210> 4699
<211> 45
<212> PRT
<213> Homo sapiens
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<400> 4699

Arg His Ser Leu Phe Trp Ile Leu Ile Gln Met Ile Leu Ile Ser Thr  
1 5 10 15

Val Ser Gly Ser Ser Gln Ser Ala Leu Thr Pro Ser Ala Cys Gln Gly  
20 25 30

His Pro Val Gln Ser Leu Ile Glu Gly Glu Phe Pro Gln  
35 40 45

<210> 4700

<211> 23

<212> PRT

<213> Homo sapiens

<400> 4700

Met Leu Ser Ile Phe Cys Phe Ile Trp Phe Ile Tyr Phe Leu Gly Phe  
1 5 10 15

Phe Met His Ile Leu Trp His  
20

<210> 4701

<211> 36

<212> PRT

<213> Homo sapiens

<400> 4701

Met Pro Glu Leu Phe Leu Leu Val Pro Leu Pro Gly Thr Leu Leu Leu  
1 5 10 15

Ser Leu Ser His Gly Trp Pro Leu Ser His Ser Pro Ser Ser Tyr Ser  
20 25 30

Glu Thr Thr Phe  
35

<210> 4702

<211> 33

<212> PRT

<213> Homo sapiens

<400> 4702

Met Leu Pro Ile Phe Val Thr Leu Phe Phe Val Cys Phe Val Leu Phe  
1 5 10 15

Cys Leu Phe Cys Pro Thr Lys Thr Asp Leu Ser Ser Cys Asp Thr Thr  
20 25 30

Met

<210> 4703



<211> 496  
 <212> PRT  
 <213> Homo sapiens

<400> 4703  
 Arg Ala Cys Asn Leu Pro Gly Arg Leu Arg Tyr Ala His Arg Leu Ser  
 1 5 10 15  
 Gly Phe Leu His Ser His Leu Arg Arg Ile Trp Leu Arg Arg Lys Trp  
 20 25 30  
 Arg Cys His Trp Pro Arg Pro Leu Pro Gln Ser Cys Val Gly Thr Glu  
 35 40 45  
 Gly Gly Leu Gln Val Arg Asp Thr Ser Ser Arg Ile Ala Lys Gly Gly  
 50 55 60  
 Val Asp His Thr Lys Met Ser Leu His Gly Ala Ser Gly Gly His Glu  
 65 70 75 80  
 Arg Ser Arg Asp Arg Arg Arg Ser Ser Asp Arg Ser Arg Asp Ser Ser  
 85 90 95  
 His Glu Arg Thr Glu Ser Gln Leu Thr Pro Cys Ile Arg Asn Val Thr  
 100 105 110  
 Ser Pro Thr Arg Gln His His Val Glu Arg Glu Lys Asp His Ser Ser  
 115 120 125  
 Ser Arg Pro Ser Ser Pro Arg Pro Gln Lys Ala Ser Pro Asn Gly Ser  
 130 135 140  
 Ile Ser Ser Ala Gly Asn Ser Ser Arg Asn Ser Ser Gln Ser Ser Ser  
 145 150 155 160  
 Asp Gly Ser Cys Lys Thr Ala Gly Glu Met Val Phe Val Tyr Glu Asn  
 165 170 175  
 Ala Lys Glu Gly Ala Arg Asn Ile Arg Thr Ser Glu Arg Val Thr Leu  
 180 185 190  
 Ile Val Asp Asn Thr Arg Phe Val Val Asp Pro Ser Ile Phe Thr Ala  
 195 200 205  
 Gln Pro Asn Thr Met Leu Gly Arg Met Phe Gly Ser Gly Arg Glu His  
 210 215 220  
 Asn Phe Thr Arg Pro Asn Glu Lys Gly Glu Tyr Glu Val Ala Glu Gly  
 225 230 235 240  
 Ile Gly Ser Thr Val Phe Arg Ala Ile Leu Asp Tyr Tyr Lys Thr Gly  
 245 250 255  
 Ile Ile Arg Cys Pro Asp Gly Ile Ser Ile Pro Glu Leu Arg Glu Ala  
 260 265 270  
 Cys Asp Tyr Leu Cys Ile Ser Phe Glu Tyr Ser Thr Ile Lys Cys Arg  
 275 280 285  
 Asp Leu Ser Ala Leu Met His Glu Leu Ser Asn Asp Gly Ala Arg Arg  
 290 295 300











[illegible][illegible][illegible][illegible][illegible][illegible]



Met Leu Pro Cys Val Leu Asp Gly Phe Leu Gln Ala Cys Leu  
 1 5 10

<210> 4711  
 <211> 48  
 <212> PRT  
 <213> Homo sapiens

<400> 4711  
 Met Glu Leu Leu Cys Trp Ser Cys Trp Cys Val Cys Leu Gly Trp Leu  
 1 5 10 15

His Thr Gly Trp Pro Ala Ser Gly Thr Ala Leu Gly Thr Met Arg Ser  
 20 25 30

Leu Thr Arg Thr Pro Arg Gln Ser Ala Thr Thr Ala Gly Cys Thr Asn  
 35 40 45

<210> 4712  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 4712  
 Glu Pro Leu Cys Leu Ser Arg Leu Val Leu Ser Thr Val His Phe Ser  
 1 5 10 15

Leu Ser Val Pro Trp Ala Leu Met Lys Lys Gln Asn Ala Pro Asn Phe  
 20 25 30

Ile His Leu Pro Ser Leu  
 35

<210> 4713  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 4713  
 Met Ser Ser Lys Thr Ala Ser Thr Asn Asn Ile Ala Gln Ala Arg Arg  
 1 5 10 15

Thr Val Gln Gln Leu Arg Leu Glu Ala Ser Ile Glu Arg Ile Lys Val  
 20 25 30

Ser Lys Ala Ser Ala Asp Leu Met Ser Tyr Cys Glu Glu His Ala Arg  
 35 40 45

Ser Asp Pro Leu Leu Ile Gly Ile Pro Thr Ser Glu Asn Pro Phe Lys  
 50 55 60

Asp Lys Lys Thr Cys Ile Ile Leu



65

70

<210> 4714  
 <211> 57  
 <212> PRT  
 <213> Homo sapiens

<400> 4714  
 Trp Val Asp Trp Gln Arg Lys Trp Thr Thr Lys Phe Phe Met Leu Arg  
 1 5 10 15  
 Ser Phe Leu Leu Glu Thr Ser Gln Ile Phe Arg Phe Leu Trp Ile Met  
 20 25 30  
 Lys Gln Lys Ser Thr Glu Asp Leu Leu Leu Leu Asn Leu Ser Trp Gln  
 35 40 45  
 Arg Met Leu Gln Gln Leu Ser Thr Thr  
 50 55

<210> 4715  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 4715  
 Gly Lys Gly Ser Gln Pro Pro Ser Pro Pro Ser Pro Ala Pro Ser Ser  
 1 5 10 15  
 Phe Ser Ser Thr Ser Val Ser Ser Leu Glu Ala Glu Ala Tyr Ala Ala  
 20 25 30  
 Phe Pro Gly Leu Gly Gln Val Pro Lys Gln Leu Ala Gln Leu Ser Glu  
 35 40 45  
 Ala Lys Asp Leu Gln Ala Arg Lys Ala Phe Asn Cys Lys Tyr Cys Asn  
 50 55 60  
 Lys Glu Tyr Leu Ser Leu Gly Ala Leu Lys Met His Ile Arg Ser His  
 65 70 75 80  
 Thr Leu Pro Cys Val Cys Gly Thr Cys Gly Lys Leu Leu  
 85 90

<210> 4716  
 <211> 36  
 <212> PRT  
 <213> Homo sapiens

<400> 4716  
 Met Gly Ser Cys Thr Trp Ser Ile Trp Leu Trp Met Val Ser Gly Val  
 1 5 10 15  
 Ala Cys Arg Ser Gln Gly Leu Ser Asp Cys Ser Pro Lys Ala Phe Leu  
 20 25 30



Trp Ser Phe Ala  
35

<210> 4717  
<211> 21  
<212> PRT  
<213> Homo sapiens

<400> 4717  
Met Tyr Gln Thr Ala Trp Ile Asp Ser Leu Pro Leu Leu Ser Phe Leu  
1 5 10 15

Val Thr Ser Val Thr  
20

<210> 4718  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 4718  
Met Gly Leu Val Ser Asn Phe Val Ile Phe Leu Val Phe Val Ser Asp  
1 5 10 15

Phe Leu Phe Lys Asn Lys Val Leu Ser Glu Cys Phe Asp Phe Pro Val  
20 25 30

Thr Thr Lys Phe Leu  
35

<210> 4719  
<211> 26  
<212> PRT  
<213> Homo sapiens

<400> 4719  
Met Ala His Ser Thr Ala Arg Trp Leu Trp Trp Leu Pro Arg Met Trp  
1 5 10 15

Thr Pro Val Pro Ser Trp Arg Tyr Ser Leu  
20 25

<210> 4720  
<211> 4  
<212> PRT  
<213> Homo sapiens

<400> 4720  
Tyr Ser Leu Thr  
1



<210> 4721  
 <211> 57  
 <212> PRT  
 <213> Homo sapiens

<400> 4721  
 Glu Pro Pro Ser Leu Glu Leu Trp Glu Lys Leu Leu Leu Leu Glu Val  
     1                    5                    10                    15  
 Pro Val Ala Glu Lys Phe Pro Asn Arg Thr Asp Ser Phe Ile Pro Pro  
                     20                    25                    30  
 Glu Phe Arg Glu Arg Ser Met Trp Thr His Val Pro Leu His Gln Arg  
                     35                    40                    45  
 Leu Leu Ser Arg His Ser Ser Ser Thr  
     50                    55

<210> 4722  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 4722  
 Phe Leu Leu Phe Leu Leu Phe Leu Leu Gln Gly Lys Tyr Lys Ile Ser  
     1                    5                    10                    15  
 Leu Glu Trp Ala Ser Arg Phe Ile Gln Pro Pro Pro Gly His Arg Phe  
                     20                    25                    30  
 Arg Glu Arg Glu Glu Glu Gly Arg Phe Gly Ala Ser Thr Thr Thr Ser  
                     35                    40                    45  
 Phe Pro His Ala Leu Leu Ser Pro Phe Pro Ser Phe Ser Thr Ser Ser  
     50                    55                    60  
 Phe Pro Ser Leu Pro Ser Met Ile Cys Pro Cys Pro Ser Val Ser Ser  
     65                    70                    75                    80  
 Ser Phe Pro Ser Phe Leu Pro Phe Leu Leu Pro Ser Leu Ala Gly Ser  
                     85                    90                    95  
 Asn Glu Gln Val Ala Leu Asn Leu Asp Ser Thr Ile Thr Gly Gly  
                     100                    105                    110

<210> 4723  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 4723  
 Met Ser Pro Pro Ala Leu Phe Leu Phe Ile His Val Leu Phe Leu Tyr  
     1                    5                    10                    15  
 Gln Tyr Cys Phe Gly Tyr Val Glu Ser Leu Ala Phe Leu Tyr Lys Phe  
                     20                    25                    30



<210> 4724  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 4724  
 Met Trp Ser Val Arg Ser Ile Leu Phe Val Leu Leu Ser Leu Met  
 1 5 10 15

<210> 4725  
 <211> 613  
 <212> PRT  
 <213> Homo sapiens

<400> 4725  
 Met Phe Arg Cys Gly Gly Leu Ala Ala Gly Ala Leu Lys Gln Lys Leu  
 1 5 10 15  
 Val Pro Leu Val Arg Thr Val Cys Val Arg Ser Pro Arg Gln Arg Asn  
 20 25 30  
 Arg Leu Pro Gly Asn Leu Phe Gln Arg Trp His Val Pro Leu Glu Leu  
 35 40 45  
 Gln Met Thr Arg Gln Met Ala Ser Ser Gly Ala Ser Gly Gly Lys Ile  
 50 55 60  
 Asp Asn Ser Val Leu Val Leu Ile Val Gly Leu Ser Thr Val Gly Ala  
 65 70 75 80  
 Gly Ala Tyr Ala Tyr Lys Thr Met Lys Glu Asp Glu Lys Arg Tyr Asn  
 85 90 95  
 Glu Arg Ile Ser Gly Leu Gly Leu Thr Pro Glu Gln Lys Gln Lys Lys  
 100 105 110  
 Ala Ala Leu Ser Ala Ser Glu Gly Glu Glu Val Pro Gln Asp Lys Ala  
 115 120 125  
 Pro Ser His Val Pro Phe Leu Leu Ile Gly Gly Gly Thr Ala Ala Phe  
 130 135 140  
 Ala Ala Ala Arg Ser Ile Arg Ala Arg Asp Pro Gly Ala Arg Val Leu  
 145 150 155 160  
 Ile Val Ser Glu Asp Pro Glu Leu Pro Tyr Met Arg Pro Pro Leu Ser  
 165 170 175  
 Lys Glu Leu Trp Phe Ser Asp Asp Pro Asn Val Thr Lys Thr Leu Arg  
 180 185 190  
 Phe Lys Gln Trp Asn Gly Lys Glu Arg Ser Ile Tyr Phe Gln Pro Pro  
 195 200 205







Arg Ser Glu Ser Glu Thr Glu Ser Glu Ala Ser Glu Ile Thr Ile Pro  
530 535 540

Pro Ser Thr Pro Ala Val Pro Gln Ala Pro Val Gln Gly Glu Asp Tyr  
545 550 555 560

Gly Lys Gly Val Ile Phe Tyr Leu Arg Asp Lys Val Val Val Gly Ile  
565 570 575

Val Leu Trp Asn Ile Phe Asn Arg Met Pro Ile Ala Arg Lys Ile Ile  
580 585 590

Lys Asp Gly Glu Gln His Glu Asp Leu Asn Glu Val Ala Lys Leu Phe  
595 600 605

Asn Ile His Glu Asp  
610

<210> 4726

<211> 36

<212> PRT

<213> Homo sapiens

<400> 4726

Met Glu Lys Arg Glu Ala Tyr Ile Ser Ser His Leu Leu Ser Met Ser  
1 5 10 15

Leu Leu Arg Thr Cys Leu Ile Leu Arg Met Val Val Trp Leu Ser Ser  
20 25 30

Leu Gly Arg Arg  
35

<210> 4727

<211> 14

<212> PRT

<213> Homo sapiens

<400> 4727

Met Pro Phe Ile Pro Ser Phe Pro Phe Leu Trp Pro Leu Leu  
1 5 10

<210> 4728

<211> 1

<212> PRT

<213> Homo sapiens

<400> 4728

Met  
1

<210> 4729

<211> 30



<212> PRT  
<213> Homo sapiens

<400> 4729  
Met Leu Val Ala Leu Leu Cys Leu Ile Arg Ile Leu Gly Glu Met Glu  
1 5 10 15  
Ser Phe Pro Gln Gly Ala Ala Gly Gly Arg Ile Gly Ser Ile  
20 25 30

<210> 4730  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 4730  
Glu Gln Ser Leu Leu Tyr Phe Ile Leu Cys Cys Phe  
1 5 10

<210> 4731  
<211> 44  
<212> PRT  
<213> Homo sapiens

<400> 4731  
Met Gly Leu Tyr Lys Gly Leu Glu Ala Lys Leu Leu Gln Thr Val Leu  
1 5 10 15  
Thr Ala Ala Leu Met Phe Leu Val Tyr Glu Lys Leu Thr Ala Ala Thr  
20 25 30  
Phe Thr Val Met Gly Leu Lys Arg Ala His Gln His  
35 40

<210> 4732  
<211> 31  
<212> PRT  
<213> Homo sapiens

<400> 4732  
Met Leu Pro Leu Leu Ile Trp Phe Leu Ala Ser Pro Cys Val Leu Arg  
1 5 10 15  
Ala Ser Gln Thr Ile His Leu Trp Val Ala Leu Leu Phe Val Ile  
20 25 30

<210> 4733  
<211> 181  
<212> PRT  
<213> Homo sapiens

<400> 4733  
Gln Leu Ala Ala Pro Ala Phe Pro Ser Pro Ser Leu Ser Tyr Arg Phe







2170

<212> PRT  
<213> Homo sapiens

<400> 4736  
Met Ile Ile Leu  
1

<210> 4737  
<211> 4  
<212> PRT  
<213> Homo sapiens

<400> 4737  
Met Ile Ile Leu  
1

<210> 4738  
<211> 39  
<212> PRT  
<213> Homo sapiens

<400> 4738  
Met Tyr Ser Leu Ala Ser Ile Met Gln Ile Lys Lys Tyr Phe Ser Leu  
1 5 10 15  
Ser Val Phe Leu Ala Leu Val Ser Ser Cys Cys Phe Cys Leu Asp Leu  
20 25 30  
Glu Arg Leu Gln Leu Ser Asn  
35

<210> 4739  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 4739  
Met Ser Ala Thr Val Ser Gly Arg Ser His Leu Trp Pro Leu Phe Ala  
1 5 10 15  
Cys Glu Lys Val  
20

<210> 4740  
<211> 97  
<212> PRT  
<213> Homo sapiens

<400> 4740  
Leu Met Leu Ser Leu Cys Leu Pro Pro Ile Leu Ser Gly Thr Gly Asp  
1 5 10 15  
Gly Gly Ser Pro Cys Glu Pro Phe Ser Cys Cys Ser Gly Arg Ala Ser











Gln Val  
50

<210> 4747  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 4747  
Met Leu Thr Gly Val Leu Leu Ser His Ile Leu Cys Ala Val Ile Cys  
1 5 10 15

<210> 4748  
<211> 46  
<212> PRT  
<213> Homo sapiens

<400> 4748  
Met Ser Leu Leu Ser Asn Val Thr Trp Ser Phe Tyr Thr Leu His Phe  
1 5 10 15  
Phe Phe Ile Ile Met Lys Asn Gly Ile Pro Pro Gly Ser Ser Lys Ile  
20 25 30  
Leu Leu Thr Glu Thr Asn Val Gly Val Arg Lys Ile Thr Ile  
35 40 45

<210> 4749  
<211> 26  
<212> PRT  
<213> Homo sapiens

<400> 4749  
Met Phe Thr Val Leu Leu Leu Glu Leu Phe Ser His Pro Thr Tyr Ala  
1 5 10 15  
Gly Phe Ser Ile Ala Phe Glu Phe Cys Val  
20 25

<210> 4750  
<211> 51  
<212> PRT  
<213> Homo sapiens

<400> 4750  
Met Leu Pro His Leu Pro Leu Ser Gly Ser Leu Leu Cys Leu Ser Cys  
1 5 10 15  
Ser Val Arg Ser Phe Ser Cys Ser Thr Asp Trp Leu Pro Pro Ser Asp  
20 25 30



Ser Gly Thr Trp Leu Ser Lys Leu Thr Asn Phe Thr Ser Cys Asn Ile  
 35 40 45

His His Gln  
 50

<210> 4751  
 <211> 61  
 <212> PRT  
 <213> Homo sapiens

<400> 4751  
 Trp Arg Arg Gly Val Gly Ser Cys Cys Trp Pro Ser Gln Pro Cys Trp  
 1 5 10 15  
 Trp Pro Thr Ser Ala Arg Leu Arg Thr Arg Thr Val Pro Ser Ser Val  
 20 25 30  
 Cys Ser Cys Arg Trp Thr Thr Trp Ser Pro Val Trp Pro Trp Ser Ala  
 35 40 45  
 Arg Lys Leu Leu Gln Ser Cys Arg Arg Thr Ser Met Ser  
 50 55 60

<210> 4752  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 4752  
 Met Lys Pro Val Ser Leu Ile Ser Leu Ser Ile Leu Ser Leu Trp Gly  
 1 5 10 15  
 Ile Leu Val Ala Phe Leu Val Thr Glu Cys Ala Cys Arg Thr Leu Ser  
 20 25 30  
 Ser Pro Trp Pro Leu Ala Ala Val Leu Cys Ser Pro Cys Leu Cys Arg  
 35 40 45  
 Ala Trp Pro Pro Gln Gln Ala Cys Trp Leu Trp Ala Ser Pro Val Leu  
 50 55 60  
 Arg Leu His Ala His Ser Leu Gly Ser Leu Ser His Leu Gly Ser Gly  
 65 70 75 80  
 Pro Thr Ser Lys Leu Val Asn Leu Gly Leu His Pro Val Ala Arg Cys  
 85 90 95  
 Leu Leu Pro Asp Ala Phe Ala Cys Leu Ser His Thr Gly Ser Ser Ser  
 100 105 110  
 Lys Ala Pro  
 115



<210> 4753  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens

<400> 4753  
 Met Ile Ile Tyr Leu Tyr Leu Phe Val Val Ile Val Ala  
 1 5 10

<210> 4754  
 <211> 345  
 <212> PRT  
 <213> Homo sapiens

<400> 4754  
 Met Ala Ala Ala Phe Arg Pro Ser Asn Arg Val Leu Leu Gln Ala Leu  
 1 5 10 15  
 Gln Ile Leu Val Tyr Pro Gly Val Gly Gly Ser Gly Ser Val Ser Cys  
 20 25 30  
 Arg Cys Pro Leu Gly Ala Lys Arg Tyr Leu Leu Thr Asp Asn Val Val  
 35 40 45  
 Lys Leu Lys Glu Phe Gln Gln Lys Lys Val Ala Val Ala Cys Asn Leu  
 50 55 60  
 Ser Gly Thr Lys Glu Thr Tyr Phe Arg Asn Leu Lys Lys Lys Leu Thr  
 65 70 75 80  
 Gln Asn Lys Leu Ile Leu Lys Gly Glu Leu Ile Thr Leu Leu His Leu  
 85 90 95  
 Cys Glu Ser Arg Asp His Val Glu Leu Ala Lys Asn Val Ile Tyr Arg  
 100 105 110  
 Tyr His Ala Glu Asn Lys Asn Phe Thr Leu Gly Glu Tyr Lys Phe Gly  
 115 120 125  
 Pro Leu Phe Val Arg Leu Cys Tyr Glu Leu Asp Leu Glu Glu Ser Ala  
 130 135 140  
 Val Glu Leu Met Lys Asp Gln His Leu Arg Gly Phe Phe Ser Asp Ser  
 145 150 155 160  
 Thr Ser Phe Asn Ile Leu Met Asp Met Leu Phe Ile Lys Gly Lys Tyr  
 165 170 175  
 Lys Ser Ala Leu Gln Val Leu Ile Glu Met Lys Asn Gln Asp Val Lys  
 180 185 190  
 Phe Thr Lys Asp Thr Tyr Val Leu Ala Phe Ala Ile Cys Tyr Lys Leu  
 195 200 205  
 Asn Ser Pro Glu Ser Phe Lys Ile Cys Thr Thr Leu Arg Glu Glu Ala  
 210 215 220  
 Leu Leu Lys Gly Glu Ile Leu Ser Arg Arg Ala Ser Cys Phe Ala Val  
 225 230 235 240







Phe Ser Val Phe Ser Ile Phe Ser Ser Leu Val His Ala Phe Cys Phe  
 20 25 30

Ala Leu Val Pro Gly Ala Tyr Leu Pro Asn  
 35 40

<210> 4757  
 <211> 69  
 <212> PRT  
 <213> Homo sapiens

<400> 4757  
 Met Phe Tyr Ser Val Ala Phe Ser Ile Phe Ala Met Leu Cys Asn His  
 1 5 10 15  
 Arg His Tyr Pro Phe Leu Glu Leu Phe Arg His Pro Arg Gln Thr Leu  
 20 25 30  
 Cys Ile His Lys Lys Ile Thr Ser Tyr Leu Ser Leu Pro Leu Val Phe  
 35 40 45  
 Gly Asn Leu Cys Tyr Thr Gly Lys Leu Cys Trp Leu Cys Val Cys Val  
 50 55 60  
 Glu Phe Gly Leu Phe  
 65

<210> 4758  
 <211> 350  
 <212> PRT  
 <213> Homo sapiens

<400> 4758  
 Met Arg Phe Asn Leu Lys Glu Val Leu Gln Val Met Pro Ser Asp Ser  
 1 5 10 15  
 Phe Phe Phe Ser Ile Val Arg Asp Pro Ala Ala Leu Ala Arg Ser Ala  
 20 25 30  
 Phe Ser Tyr Tyr Lys Ser Thr Ser Ser Ala Phe Arg Lys Ser Pro Ser  
 35 40 45  
 Leu Ala Ala Phe Leu Ala Asn Pro Arg Gly Phe Tyr Arg Pro Gly Ala  
 50 55 60  
 Arg Gly Asp His Tyr Ala Arg Asn Leu Leu Trp Phe Asp Phe Gly Leu  
 65 70 75 80  
 Pro Phe Pro Pro Glu Lys Arg Ala Lys Arg Gly Asn Ile His Pro Pro  
 85 90 95  
 Arg Asp Pro Asn Pro Pro Gln Leu Gln Val Leu Pro Ser Gly Ala Gly  
 100 105 110  
 Pro Arg Ala Gln Thr Leu Asn Pro Asn Ala Leu Ile His Pro Val Ser  
 115 120 125















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<210> 4769
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<212> PRT
<213> Homo sapiens
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<210> 4770
<211> 46
<212> PRT
<213> Homo sapiens
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<210> 4771
<211> 12
<212> PRT
<213> Homo sapiens
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<210> 4772
<211> 28
<212> PRT
<213> Homo sapiens
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2181



<210> 4773  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 4773  
Met Pro Arg Pro Ser Leu Thr Leu Gly Leu Leu Leu Pro Ser Gln His  
1 5 10 15  
Leu Cys Ala Asn His Thr Leu Leu Gln His Phe Phe Asn Pro Lys Ile  
20 25 30  
Ile Ala

<210> 4774  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 4774  
Met Cys Val Thr Ala Ile Tyr Lys Pro Ile Trp Cys Asn Ser Tyr Pro  
1 5 10 15

<210> 4775  
<211> 29  
<212> PRT  
<213> Homo sapiens

<400> 4775  
Met Lys Leu Leu Phe Phe Leu Met Arg Asp Val Asn Ser Ile Ser Leu  
1 5 10 15  
Leu Tyr Leu Ile Thr Cys Leu Pro Cys Phe Cys Val Thr  
20 25

<210> 4776  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 4776  
Met Ala Ser His Gly Gly Phe Asp Leu His Phe Pro Gly Val  
1 5 10

<210> 4777  
<211> 8  
<212> PRT  
<213> Homo sapiens



<400> 4777  
Met Val Asn Leu Cys Leu Glu Val  
1 5

<210> 4778  
<211> 55  
<212> PRT  
<213> Homo sapiens

<400> 4778  
Met Lys Glu Ala Phe Arg Trp Ala Leu Phe Ser Met Gln Ala Thr Gly  
1 5 10 15

His Val Leu Leu Gly Thr Ser Cys Tyr Leu Gln Gln Leu Leu Asp Ala  
20 25 30

Thr Glu Glu Gly Gln Pro Pro Lys Gly Lys Ala Ser Ser Leu Ile Pro  
35 40 45

Thr Cys Leu Lys Ile Leu Gln  
50 55

<210> 4779  
<211> 55  
<212> PRT  
<213> Homo sapiens

<400> 4779  
Ile Pro Leu Thr Met Arg Leu Thr Lys Thr Phe Thr Phe Val Gln Lys  
1 5 10 15

Val Lys Lys Lys Lys Thr Trp Leu Arg Lys Arg Arg His Val Thr Ser  
20 25 30

Ser Tyr Thr Pro Ile Thr Val Ala Leu Gln Lys Ile Lys Ile Thr Thr  
35 40 45

Phe Lys Lys Ile Asn Leu Ile  
50 55

<210> 4780  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 4780  
Met Phe Ser Leu Glu Val Leu Phe Leu Phe Ala Gly  
1 5 10

<210> 4781  
<211> 43  
<212> PRT  
<213> Homo sapiens



[illegible]Met Pro Ser Thr Tyr Leu Ile Gln Pro Phe Gln Tyr Asn Ser Tyr Thr  
20 25 30

Cys His Leu Ser Lys Pro Lys Gly Thr Ser Ser  
35 40

<211> 18

<212> PRT

<213> Homo sapiens

Met Ser Ser Leu Gln Ile Phe Ser Pro Ile Leu Trp Leu Val Ser Ser  
1 5 10 15

Leu Cys

<211> 55

<212> PRT

<213> Homo sapiens

**<220>**

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

**<220>**

&lt;221&gt; SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

Met Ile Ala Ala Pro Leu Trp Ser Ala Cys Phe Leu Val Arg Val Pro  
1 5 10 15

Ser Xaa Val Ser Leu Gly Ala Pro Ser Ser Leu Ser Ser Ser Xaa Ser  
20 25 30

Pro Leu Ala Val Ala Val Val Ala Ala His Ala Pro Gly Ile Pro Leu  
35 40 45

Gln His Ser Leu Leu Ser Ser  
50 55

<211> 37

<212> PRT

<213> Homo sapiens











Met His Val Leu Leu Phe Ser Phe Leu Ile Pro Phe Leu Leu Leu Ser  
 1 5 10 15

Pro Val Gly Val Thr Cys Asn Ser His Met Leu Glu Arg Gln Xaa Ser  
 20 25 30

Trp Leu Lys Lys Arg Ser Thr Gln Ala Ser Gln His Val  
 35 40 45

<210> 4791  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens

<400> 4791  
 His Val Leu Phe Asp Ala Phe Ser Leu Leu His Cys Phe  
 1 5 10

<210> 4792  
 <211> 81  
 <212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (22)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4792  
 Met Glu Cys Leu Leu Tyr Arg Thr Ile Cys Leu Phe Tyr Phe Leu Val  
 1 5 10 15  
 Arg Phe Leu Phe Ser Xaa Leu Leu Leu Met Lys Leu Phe Leu Pro Ile  
 20 25 30  
 Ile Asn Pro Asn Ser Trp Thr Leu Trp Leu Gly Asn Ser Leu Asn Phe  
 35 40 45  
 Gln Pro Tyr Gly Ile Ile Val Ser Leu Ser Leu Ser Leu Leu Ser  
 50 55 60  
 Leu Phe Ser Ser Ser Pro Tyr Phe Leu Ser Asn Lys Tyr Cys Leu Leu  
 65 70 75 80  
 Ile

<210> 4793  
 <211> 218  
 <212> PRT  
 <213> Homo sapiens

<400> 4793  
 Met Ala Met Phe Glu Gln Met Arg Ala Asn Val Gly Lys Leu Leu Lys  
 1 5 10 15



Gly Ile Asp Arg Tyr Asn Pro Glu Asn Leu Ala Thr Leu Glu Arg Tyr  
20 25 30

Val Glu Thr Gln Ala Lys Glu Asn Ala Tyr Asp Leu Glu Ala Asn Leu  
35 40 45

Ala Val Leu Lys Leu Tyr Gln Phe Asn Pro Ala Phe Phe Gln Thr Thr  
50 55 60

Val Thr Ala Gln Ile Leu Leu Lys Ala Leu Thr Asn Leu Pro His Thr  
65 70 75 80

Asp Phe Thr Leu Cys Lys Cys Met Ile Asp Gln Ala His Gln Glu Glu  
85 90 95

Arg Pro Ile Arg Gln Ile Leu Tyr Leu Gly Asp Leu Leu Glu Thr Cys  
100 105 110

His Phe Gln Ala Phe Trp Gln Ala Leu Asp Glu Asn Met Asp Leu Leu  
115 120 125

Glu Gly Ile Thr Gly Phe Glu Asp Ser Val Arg Lys Phe Ile Cys His  
130 135 140

Val Val Gly Ile Thr Tyr Gln His Ile Asp Arg Trp Leu Leu Ala Glu  
145 150 155 160

Met Leu Gly Asp Leu Ser Asp Ser Gln Leu Lys Val Trp Met Ser Lys  
165 170 175

Tyr Gly Trp Ser Ala Asp Glu Ser Gly Gln Ile Phe Ile Cys Ser Gln  
180 185 190

Glu Glu Ser Ile Lys Pro Lys Asn Ile Val Glu Lys Ile Asp Phe Asp  
195 200 205

Ser Val Ser Ser Ile Met Ala Ser Ser Gln  
210 215

<210> 4794  
<211> 30  
<212> PRT  
<213> Homo sapiens

<400> 4794  
Met Ala Ser Ser Leu Leu Ala Gln Ile Val Leu Gly Gly Trp Leu Phe  
1 5 10 15

Val Gly Ala Phe Asn Ile Gln Arg Gly Glu Tyr Cys Ser Asp  
20 25 30

<210> 4795  
<211> 12  
<212> PRT  
<213> Homo sapiens



<400> 4795  
 Met Thr Lys Ile Leu Trp Leu Phe Leu Phe Leu Leu  
 1 5 10

<210> 4796  
 <211> 27  
 <212> PRT  
 <213> Homo sapiens

<400> 4796  
 Met Phe Gly Val Leu Leu Val Tyr Leu Leu Phe Tyr Thr Phe Ala Thr  
 1 5 10 15

Ile Ser Leu Val Asn Gly Met Val Trp Gly Phe  
 20 25

<210> 4797  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 4797  
 Glu Trp Asn Ile Phe Leu Leu Phe Ser Cys Ile Cys Leu Tyr Phe Ser  
 1 5 10 15

Leu Met Asn Asp Trp Ser  
 20

<210> 4798  
 <211> 12  
 <212> PRT  
 <213> Homo sapiens

<400> 4798  
 Arg Pro Leu Trp Gly Leu Gly Lys Arg Ser Leu His  
 1 5 10

<210> 4799  
 <211> 27  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (11)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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 <222> (27)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4799



Met Lys Ser Asp Leu Gly Pro Glu Leu Gln Xaa Ser Leu Ile Leu Gln  
 1 5 10 15

Asn Thr Ile Ile Ser Ala Tyr Glu Lys Asp Xaa  
 20 25

<210> 4800  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 4800  
 Met Trp Pro Cys Met Thr Leu Leu Leu Leu Tyr Phe Leu Phe Pro Phe  
 1 5 10 15

Gln Met Gly Ile Arg Thr Val Gly Gln Gln Gln Ser Gln Ser Gln  
 20 25 30

<210> 4801  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<400> 4801  
 Thr Leu Ile Thr Cys Phe Ala Asn Phe Lys Cys Leu Asn Ile Ser Glu  
 1 5 10 15

Thr Ser Ser Lys Tyr Val Gly Gln Leu Lys Asn Phe Asp Cys  
 20 25 30

<210> 4802  
 <211> 43  
 <212> PRT  
 <213> Homo sapiens

<400> 4802  
 Met Pro Leu Leu Phe Phe Ser Val Ser Thr Leu Phe Ser Gly Ser Val  
 1 5 10 15

Thr Leu Gln Gln Arg Gly Met Phe Leu Pro Trp Thr Gly Thr Gly Asn  
 20 25 30

Arg Cys Leu Pro Cys Tyr Gly His Gly Leu Asn  
 35 40

<210> 4803  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 4803  
 Lys Gln Leu Tyr Leu Glu Ser Tyr Cys Leu Gly Phe Leu Ile Arg His  
 1 5 10 15



Ser Ser Pro Asp  
20

<210> 4804  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 4804  
Leu Arg Pro Arg Ser Pro Gly Leu Ala Gly Arg Gly Cys Leu  
1 5 10

<210> 4805  
<211> 73  
<212> PRT  
<213> Homo sapiens

<400> 4805  
Met Gly Cys Phe Val Val Val Val Phe Val Val Gly His Leu Ser  
1 5 10 15  
Ile Phe Ser His Gln Phe Cys Ser Leu Leu Ala Met Asp Lys Ile Gly  
20 25 30  
Ser Phe Trp Leu Ile Lys Lys Asp Asn Phe Ile Lys Trp His Phe Lys  
35 40 45  
Gln Ala Ile Val Ser Phe Ile Ile Cys Asn Ala His Gly Lys Ala Lys  
50 55 60  
Thr Phe Val Met Lys Glu Leu Leu Ile  
65 70

<210> 4806  
<211> 117  
<212> PRT  
<213> Homo sapiens

<400> 4806  
Val Ala Val His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro  
1 5 10 15  
Asn Ile Glu Ala Val Ser Asn Val His Asn Leu Asn Ser Val Lys Glu  
20 25 30  
Ser Pro His Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe  
35 40 45  
Ser Thr Val Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu  
50 55 60  
Cys Trp Val Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg  
65 70 75 80







<400> 4810

Met Cys Pro Arg Leu Leu Phe Ser Trp Ala Phe Leu Ser Arg  
1 5 10

<210> 4811

<211> 56

<212> PRT

<213> Homo sapiens

<400> 4811

Met Lys Arg Gly Val Leu Gly Gln Leu Phe Ser Ser Leu His Pro Ile  
1 5 10 15

Ser Thr Pro Pro Pro Trp Pro Pro Ala Ser Leu Arg Leu Ile Gln Tyr  
20 25 30

Pro Asn Leu Leu Leu Ile Thr Glu Lys Asn Val Lys Lys Glu Glu Lys  
35 40 45

Arg Lys Ala Arg Ser Leu Ser Lys  
50 55

<210> 4812

<211> 39

<212> PRT

<213> Homo sapiens

<400> 4812

Met Arg Met Leu Arg Glu Ile Val Gly Cys Leu Glu Phe His Tyr Ile  
1 5 10 15

Phe Cys Phe Tyr Phe Leu Ile Pro Arg Cys Phe Leu Lys Tyr Ser Asp  
20 25 30

Lys Tyr Leu Ser Tyr Ile Asp  
35

<210> 4813

<211> 36

<212> PRT

<213> Homo sapiens

<400> 4813

Met Gln Leu Phe Ser Leu Phe Phe Ser Phe Pro Pro Ser Leu His Pro  
1 5 10 15

Ser Pro Ile Pro Pro Ser Leu Pro Tyr Ser Ser Arg Leu Pro Pro Ser  
20 25 30

Leu Pro Pro Ser  
35

<210> 4814



<211> 36  
 <212> PRT  
 <213> Homo sapiens

<400> 4814  
 Met Asp Asn Arg Thr Ala Leu Ser Val Gly Met Val Val Leu Leu Glu  
 1 5 10 15  
 Asp Cys Ile Ile Gly Gly Leu Val Ser Ser Ser Leu Pro Gly Gln Ser  
 20 25 30  
 Ser Glu Val Leu  
 35

<210> 4815  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 4815  
 Met Ala Cys Ile Leu Phe Ser Leu Leu Cys Leu Ile Leu Phe Asp Phe  
 1 5 10 15  
 Pro Leu Gln His Ser Val Ser Val Lys Gly Phe Tyr Ala Phe Thr Ser  
 20 25 30  
 His Val Leu Asn Thr Leu Arg Thr Thr His Leu Val Phe Thr Leu Leu  
 35 40 45  
 Pro Val Asn Val Trp Asn Leu Glu Ser His Arg Val Ala Leu Lys Gln  
 50 55 60  
 Cys Val Phe Ser Leu Arg Ser Ser Ala His Phe Ala Thr Thr Arg Glu  
 65 70 75 80  
 Glu Phe Ser Ala Lys Ala Asn Pro Cys Ser Leu Thr  
 85 90

<210> 4816  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 4816  
 Glu Arg Cys Leu Leu Ile Leu Cys Val Val Thr Gln Arg Ser Ser Thr  
 1 5 10 15  
 Phe Pro Ser Leu Cys Arg  
 20

<210> 4817  
 <211> 70  
 <212> PRT  
 <213> Homo sapiens



<400> 4817

Met Trp Leu Leu Ile Asn Leu Thr Ala Ser Arg Cys Ser Ser Pro Pro  
 1 5 10 15  
 Cys Gln Ala Leu Cys Leu Leu Ile Ala Leu Trp Gly His Ser Leu Ile  
 20 25 30  
 Tyr Ser Pro Ala Leu Gly Asn Arg Ser Cys His Tyr Pro Ser Leu Ser  
 35 40 45  
 Ala Gln Gly Lys Ile Asn Ala Leu Arg Ile Val Ile Ile Phe Pro Arg  
 50 55 60  
 Leu Pro Ser Trp Trp Cys  
 65 70

<210> 4818

<211> 27

<212> PRT

<213> Homo sapiens

<400> 4818

Ala Arg Val Cys Ser Lys Val Thr Leu Leu Leu Phe Trp Thr Leu Leu  
 1 5 10 15  
 Ser Gly Lys Lys Gly Cys Arg Leu Pro Ala Met  
 20 25

<210> 4819

<211> 350

<212> PRT

<213> Homo sapiens

<400> 4819

Met His Pro Ala Ala Phe Pro Leu Pro Val Val Val Ala Ala Val Leu  
 1 5 10 15  
 Trp Gly Ala Ala Pro Thr Arg Gly Leu Ile Arg Ala Thr Ser Asp His  
 20 25 30  
 Asn Ala Ser Met Asp Phe Ala Asp Leu Pro Ala Leu Phe Gly Ala Thr  
 35 40 45  
 Leu Ser Gln Glu Gly Leu Gln Gly Phe Leu Val Glu Ala His Pro Asp  
 50 55 60  
 Asn Ala Cys Ser Pro Ile Ala Pro Pro Pro Pro Ala Pro Val Asn Gly  
 65 70 75 80  
 Ser Val Phe Ile Ala Leu Leu Arg Arg Phe Asp Cys Asn Phe Asp Leu  
 85 90 95  
 Lys Val Leu Asn Ala Gln Lys Ala Gly Tyr Gly Ala Ala Val Val His  
 100 105 110  
 Asn Val Asn Ser Asn Glu Leu Leu Asn Met Val Trp Asn Ser Glu Glu  
 115 120 125







50

55

<210> 4821  
 <211> 27  
 <212> PRT  
 <213> Homo sapiens

<400> 4821  
 Met Thr Val Met Val Thr Leu Leu Phe Leu Leu Arg Tyr Val Thr Ala  
           1                  5                  10                  15  
 Leu Arg Leu Thr Arg Ala Thr Trp Ser Cys Trp  
                   20                  25

<210> 4822  
 <211> 71  
 <212> PRT  
 <213> Homo sapiens

<400> 4822  
 Met Ile Met Ser Ser Ser Asn Ser Ser Ile Trp Pro Ala Met Pro Cys  
           1                  5                  10                  15  
 Met Leu Leu Ser Val Tyr Ser Tyr Leu Phe Ser Cys Ile Ser His Gly  
                   20                  25                  30  
 Ser Pro Arg Leu Ser Ala Leu Gln Pro Pro Lys Pro Cys Ser Ser Phe  
                   35                  40                  45  
 Ser Asn Ser Ser Ala Pro Tyr Leu Arg Ala Phe Ala Ser Ala Arg Cys  
           50                  55                  60  
 Thr Ser Phe Pro Tyr Phe Thr  
           65                  70

<210> 4823  
 <211> 57  
 <212> PRT  
 <213> Homo sapiens

<400> 4823  
 Met Asp Phe Leu Cys Phe Leu Leu Leu Ser Gly Ala Thr Pro Ala Leu  
           1                  5                  10                  15  
 Thr Ser Ser Gly Thr Ser Cys Gln His Ser Pro His Ser Leu Met Pro  
                   20                  25                  30  
 Gln Ser Cys His Thr Arg Leu Ile Pro Cys Leu Pro Val Cys Leu Gln  
                   35                  40                  45  
 Pro Asp Ala Ala Arg Pro Arg Leu Pro  
           50                  55



<210> 4824  
<211> 2  
<212> PRT  
<213> Homo sapiens

<400> 4824  
Phe Pro  
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<210> 4825  
<211> 24  
<212> PRT  
<213> Homo sapiens

<400> 4825  
Ile Arg Arg Val Leu Trp Ala Pro Gly Gln Pro Ser Cys Leu Ser Ser  
1 5 10 15  
Pro Ala Val Ser Arg Gly Arg Trp  
20

<210> 4826  
<211> 24  
<212> PRT  
<213> Homo sapiens

<400> 4826  
Ile Arg Arg Val Leu Trp Ala Pro Gly Gln Pro Ser Cys Leu Ser Ser  
1 5 10 15  
Pro Ala Val Ser Arg Gly Arg Trp  
20

<210> 4827  
<211> 24  
<212> PRT  
<213> Homo sapiens

<400> 4827  
Ile Arg Arg Val Leu Trp Ala Pro Gly Gln Pro Ser Cys Leu Ser Ser  
1 5 10 15  
Pro Ala Val Ser Arg Gly Arg Trp  
20

<210> 4828  
<211> 54  
<212> PRT  
<213> Homo sapiens

<400> 4828  
Met Cys Gln Thr Trp Ala Arg Cys Leu Arg Leu Met Phe His Pro Thr  
1 5 10 15



Cys Leu Thr Cys Pro Ala Leu Pro Thr Thr Ser Cys Thr Leu Pro Thr  
 20 25 30

Trp Ala Pro Ala Leu Pro Pro Leu Pro Leu Ala Pro Phe Gln Asn Cys  
 35 40 45

Pro Pro Ser Thr Leu Arg  
 50

<210> 4829  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens

<400> 4829  
 Met Leu Pro Gly Val Leu Trp Tyr Leu Ala Arg Cys Arg  
 1 5 10

<210> 4830  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 4830  
 Met Val Gly Pro Arg Leu Pro Met Gly Leu Leu Phe Val Ala Ser Phe  
 1 5 10 15

Leu Phe Leu Phe Ile Gln Cys Val His Met Pro Arg Ser Tyr Leu  
 20 25 30

<210> 4831  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

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<220>  
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 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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 <222> (79)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4831  
 Met Arg Ser Pro His Val Arg Val His Leu Val Tyr Phe Gln Arg Leu  
 1 5 10 15



Ala Arg Gly Ser Asp Glu Arg Thr Cys Ser Ala Pro Ala Phe Ser Ser  
20 25 30

Phe Arg Glu Phe Ser Arg Gly Leu Gln Arg Phe Pro His Ala Ala Ser  
35 40 45

His Ser Ser Cys Thr Ile Val His Ser Asn Ser Asn Gly Gln Gly Leu  
50 55 60

Gln Ser Xaa Arg Ile Xaa Ala Asn Ile Tyr Tyr Phe Met Trp Xaa Phe  
65 70 75 80

Phe Leu Phe Phe Phe Phe Phe Phe  
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Met Asn Lys Ser Thr Phe Leu Phe Leu Ile Ile Met Trp Pro Asn Val  
1 5 10 15

Tyr Ile Ser Leu Ser Val Ala His His Ile Val Leu Thr Lys Thr Ile  
20 25 30

Ser Ser Phe Thr Pro Ala Gln Ile Phe Lys Tyr Ser Leu Leu Phe Pro  
35 40 45

Thr Ser Val Ser Gly Ile Ala Ile Leu Phe Lys Thr Tyr Leu Lys Asn  
50 55 60

Val Gln Ala Ser His Leu Cys Val Lys Leu Phe Ser Leu Phe Gln Cys  
65 70 75 80

Asp Glu Lys Asn Trp Thr Glu His Thr Phe Leu  
85 90

<210> 4834  
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<213> Homo sapiens

<400> 4834  
Met Tyr Met Leu Val Cys Ile Cys Val Phe Ile Leu Asn Ser Tyr Ile



1

5

10

15

Cys Cys Ile Tyr Leu Val Leu Ser Met Leu Tyr Asp Ser Thr Thr Ser  
 20 25 30

Lys Met Asp Gln Val  
 35

&lt;210&gt; 4835

&lt;211&gt; 40

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4835

Leu Cys Leu Met Cys Trp Trp Leu Pro Gly Gly Leu Ala Ser Asp Ser  
 1 5 10 15

Glu Glu Asp Thr Lys Lys Leu Ile Val Ser Leu Asn Trp Leu Phe Tyr  
 20 25 30

Leu Leu Arg Leu Cys Leu Ser Tyr  
 35 40

&lt;210&gt; 4836

&lt;211&gt; 36

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4836

Met His Leu Cys Cys Asn Leu Cys Trp Tyr Ala Leu Asp Leu Val Phe  
 1 5 10 15

Pro Trp Phe Phe Ala Ala Val Ser Gln Val Ala Arg Phe Asp Ile Ser  
 20 25 30

Leu Ser Leu Ile  
 35

&lt;210&gt; 4837

&lt;211&gt; 2

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4837

Ser Leu  
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&lt;210&gt; 4838

&lt;211&gt; 31

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4838







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<211> 25
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<211> 23
<212> PRT
<213> Homo sapiens
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<210> 4845
<211> 18
<212> PRT
<213> Homo sapiens
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Val Ala

2203



Table 1. Demographic characteristics of the study population	
Age (years)	Mean (SD)
Male	55.2 (10.5)
Female	56.8 (11.2)
Marital status	
Married	78.5%
Single	21.5%
Education level	
High school or above	65.2%
Below high school	34.8%
Occupation	
Professional	12.3%
Managerial	18.7%
Technical	25.4%
Service	32.1%
Unemployed	11.5%
Income (USD/month)	
< 1000	15.2%
1000-2000	28.7%
2000-3000	35.4%
> 3000	20.7%
Health insurance	
Yes	89.1%
No	10.9%
Smoking status	
Smoker	22.3%
Non-smoker	77.7%
Alcohol consumption	
Regular	8.5%
Occasional	14.2%
Never	77.3%

Leu Leu Ser Gly Ile  
20

<213> Homo sapiens

Phe Leu Phe Ser Phe Gln Ile Ile Ala Pro  
20 25

<213> Homo sapiens

Met Asn Asn Asp Cys  
1 5

<213> Homo sapiens

Asn Tyr Met Ser Ile Pro Gly Leu Phe Trp Ile Glu  
85 90



0955083-094204

<210> 4850  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 4850  
 Phe Cys Thr His Ala Phe Thr Ser Glu  
 1 5

<210> 4851  
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<220>  
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 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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 <222> (22)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
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 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
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 <222> (45)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (50)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4851  
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 1 5 10 15  
 Ala Ala Tyr Leu Gly Xaa Pro Thr Gln Cys Ser Thr Ser Xaa Pro Ala  
 20 25 30  
 Pro Leu Lys Thr Gln Ser His Met Asn Leu Ala Phe Xaa Phe Ser Asn  
 35 40 45  
 Ile Xaa Thr Ser Val Leu Leu Val Pro Thr Ser Pro Ser Pro Ala Trp  
 50 55 60  
 Arg Lys Gly Tyr Phe Gln Gly Thr Thr Val Val Gln Leu Ser Gln Val  
 65 70 75 80  
 Phe Leu Leu Ser Ile Asn His Pro Ala Ala Leu Gly Cys Pro Ala Ser  
 85 90 95  
 Gln Pro Ser Gly



















Ile His Leu  
35

<210> 4864  
<211> 35  
<212> PRT  
<213> Homo sapiens

<400> 4864  
Met Trp Cys Ala Leu Gly Phe Trp Gly Arg Ala Trp Gly Ser Arg Gly  
1 5 10 15  
Pro Trp Ala Ala Gln Pro Gly Glu Pro Gln Pro Arg Gly Trp Ser Cys  
20 25 30  
Ser Gly Asn  
35

<210> 4865  
<211> 35  
<212> PRT  
<213> Homo sapiens

<400> 4865  
Met Trp Cys Ala Leu Gly Phe Trp Gly Arg Ala Trp Gly Ser Arg Gly  
1 5 10 15  
Pro Trp Ala Ala Gln Pro Gly Glu Pro Gln Pro Arg Gly Trp Ser Cys  
20 25 30  
Ser Gly Asn  
35

<210> 4866  
<211> 35  
<212> PRT  
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<400> 4866  
Met Trp Cys Ala Leu Gly Phe Trp Gly Arg Ala Trp Gly Ser Arg Gly  
1 5 10 15  
Pro Trp Ala Ala Gln Pro Gly Glu Pro Gln Pro Arg Gly Trp Ser Cys  
20 25 30  
Ser Gly Asn  
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<210> 4867  
<211> 52  
<212> PRT  
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67. 雑費	円	100
68. 雑費	円	100
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73. 雑費	円	100
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83. 雑費	円	100
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100. 雑費	円	100

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<211> 15
<212> PRT
<213> Homo sapiens
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<210> 4869
<211> 18
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<213> Homo sapiens
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Met Ser Val Thr Ser Ala Trp Cys Gly Val Trp Ile Ile Tyr Arg Ile  
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<213> Homo sapiens
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Asp Ala Val Leu Ala Trp Trp Leu Cys Leu Glu Trp Gln His Leu His  
1 5 10 15

Val Gln Leu Ala Pro Ser Ala Tyr Gly Cys Trp His Gly Gly Ile Leu  
20 25 30

Trp Arg Cys Val Thr Gly Val Pro Pro Ala Pro Val Val Gly Gly Ala  
35 40 45

Gln Thr Ala Leu Glu Thr Pro Pro Cys Ser Ala Ala Pro Asp Gly Leu  
50 55 60

Arg Pro His Cys Cys Gly Ala Gly Cys Cys Leu Tyr Val Ser Gln Pro  
65 70 75 80







<210> 4873  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 4873  
 Ile Ser Arg Arg Cys Ile Leu Phe Asp Asn Ser Phe Ser Tyr Arg Leu  
 1 5 10 15  
 Pro Leu Gln Thr Thr  
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<210> 4874  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 4874  
 Met His Ser Leu Val Leu Leu Cys Pro Leu Cys Ser Asp Pro Cys Gly  
 1 5 10 15  
 Val Cys Val Ala Pro Lys His Ser His Ser Gln Gly Gln Gln Pro Asp  
 20 25 30  
 Ser Glu Leu His Pro Pro Cys Leu Pro His Thr Leu Leu Ser Leu Phe  
 35 40 45  
 Leu Ala Leu His Arg Pro Pro Gln Pro Cys His Leu Pro Pro Leu Thr  
 50 55 60  
 Asp His Leu Cys Ser Cys Val His Ser Gly Cys Val Phe Cys Arg Ala  
 65 70 75 80  
 Phe Gln Ala Ile Arg Pro Glu Ser Arg Ile Arg Lys Trp Met Gly Pro  
 85 90 95  
 Gln Lys Thr Asn Ser Val Val Phe Leu Cys Ser Phe Thr Gln Val Thr  
 100 105 110  
 Leu Cys Gly Ile Trp Leu Gly Thr Glu Pro Pro Phe Val Asn Lys Asp  
 115 120 125  
 Pro Gln Phe Met Pro Gly Tyr Ile Ile Ile Gln Cys Asn Glu Gly Ser  
 130 135 140  
 Val Thr Ala Phe Tyr Ser Val Leu Gly Tyr Leu Gly Phe Leu Val Leu  
 145 150 155 160  
 Gly Ser Leu Ala Val Ala Phe Leu Ala Arg Asn Leu Pro Asp Ala Phe  
 165 170 175  
 Asn Glu Ala Lys Phe Leu Thr Phe Ser Met Leu Val Ser Cys Ser Val  
 180 185 190  
 Trp Val Ala Phe Leu Pro Ser Tyr  
 195 200







<400> 4878

Met Ser Phe Tyr Arg Leu Val His Ser Asn Gln Asp Leu Asn Ser Leu  
1 5 10 15

Arg Gly Leu Leu Met Glu Phe Val Phe Leu Phe His Leu Phe Gln Ser  
20 25 30

Lys Ala Val Phe Pro Ser Phe Ser Phe Pro Cys Cys Cys Leu Val Glu  
35 40 45

Ile Gln Ser Ser Ile Gln  
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<210> 4879

<211> 76

<212> PRT

<213> Homo sapiens

<220>

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<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4879

Met Pro Ile Pro Phe Pro Gly Glu Gln Val His Leu Pro Phe Leu Ser  
1 5 10 15

Leu Leu Ala His Trp His Gln Thr Gln Leu Pro Ser Lys Gly Pro Leu  
20 25 30

Ala Ser Arg Ala Gln Ile Gln Pro Phe Ser Gln Glu Pro Leu Gly His  
35 40 45

Leu Ala Xaa Thr Gln Leu Thr Ser Gln Gly Pro Leu Ala Cys Arg Val  
50 55 60

Gln Val Gln Leu Pro Ser Gln Gly Leu Leu Ala His  
65 70 75

<210> 4880

<211> 38

<212> PRT

<213> Homo sapiens

<400> 4880

Met Ile His Ser Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu  
1 5 10 15

Ile Leu Leu Arg Ile Ser Ile Ser Arg Leu Thr Gly Thr Asn Thr Leu  
20 25 30

Val Phe Asn Leu Ile Leu  
35







35

40

45

Lys Ser Phe Ser Lys  
50

<210> 4885  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 4885  
Met Trp Leu Ser Arg Glu Val Leu Val Leu Ile Ser Ile Ser Ala Ser  
1 5 10 15

Gly

<210> 4886  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 4886  
Met Asn Pro Cys Phe Phe Ser Val Leu Val Leu Leu Pro Glu Leu Ala  
1 5 10 15

Leu Gln Trp Lys  
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<210> 4887  
<211> 30  
<212> PRT  
<213> Homo sapiens

<400> 4887  
Met Leu Leu Cys Phe Met Arg Ile Lys Ile Pro Ala Leu Leu Cys Leu  
1 5 10 15

Trp Tyr Leu Pro Leu His Ile Leu Val Met Ala Trp Glu Val  
20 25 30

<210> 4888  
<211> 33  
<212> PRT  
<213> Homo sapiens

<400> 4888  
Met Pro Leu Leu Leu Arg Trp Val Ser Trp Leu Gln Val Trp Lys Pro  
1 5 10 15

Arg Pro Pro Leu Ser Arg Arg Arg Lys Thr Ser Gln Leu Lys Pro Arg  
20 25 30



[illegible][illegible][illegible]



<213> Homo sapiens

<400> 4890

Met His Leu Phe Ile Cys Thr Leu Trp Asn Ile Phe Cys Asn Lys Pro  
1 5 10 15

Val Ser Trp Ser Ser Val Ser Cys Ser Asn Lys Phe Ile Lys Pro Lys  
20 25 30

Glu Gly Val Val Gly Ile Pro Ile Tyr Arg Arg Leu Val Arg Ser Thr  
35 40 45

Ser

<210> 4891

<211> 20

<212> PRT

<213> Homo sapiens

<400> 4891

Met Ile Leu Ser Thr Asn Leu Phe Thr Asp Leu Phe Ile Leu Phe Leu  
1 5 10 15

Val Leu His Ser  
20

<210> 4892

<211> 12

<212> PRT

<213> Homo sapiens

<400> 4892

Met Ala His Pro Asn Arg Ile Leu Leu Val Pro Trp  
1 5 10

<210> 4893

<211> 35

<212> PRT

<213> Homo sapiens

<400> 4893

Met Thr Lys Ile Val Asn Thr Ser Leu Phe Leu Ala Ser Val Thr Ile  
1 5 10 15

Ile Val Ser Ala Thr Ser Gly Val Glu Gln Pro Ser Thr Gln Arg Ser  
20 25 30

Leu Ala Phe  
35

<210> 4894

<211> 66



<212> PRT  
<213> Homo sapiens

<400> 4894  
Met Phe Leu Cys Gly Phe Phe Val Val Val Phe Val Trp Gly Gly Gly  
1 5 10 15  
Lys Tyr Arg Val Ile His Glu Gln Asp Ile Ser Leu Leu Ser Lys Ser  
20 25 30  
Leu Gly Ser Arg Cys Gly Ser Glu Met Ala Trp Glu Gly Pro Cys Gly  
35 40 45  
Gln Trp Phe Tyr Leu Phe Phe Leu Ser Leu Leu Ile Ser Gly Leu Leu  
50 55 60  
Arg Phe  
65

<210> 4895  
<211> 30  
<212> PRT  
<213> Homo sapiens

<400> 4895  
Met Leu Ser Ser Val Met Leu Leu Ser Val Leu Gln Val His Leu His  
1 5 10 15  
Leu Arg Ala Glu Leu His Leu Leu Pro Leu Pro Leu Gln Arg  
20 25 30

<210> 4896  
<211> 29  
<212> PRT  
<213> Homo sapiens

<400> 4896  
Val Asn Leu Asp His Leu Val Lys Val Val Phe Ala Arg Phe Leu His  
1 5 10 15  
Tyr Lys Val Asn Ile Phe Pro Phe Pro Tyr Tyr Phe Leu  
20 25

<210> 4897  
<211> 38  
<212> PRT  
<213> Homo sapiens

<400> 4897  
Met Cys Glu Ala Arg Gln Leu Leu Val Leu Gln Leu Leu Cys Gly Lys  
1 5 10 15  
Gln Lys Pro Phe Cys Ser Val Pro Gln Pro Ala Phe Val Ser Arg Ile  
20 25 30



Glu Glu Leu Phe His Lys  
35

<210> 4898  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 4898  
Met Lys Ile Arg Lys Arg Arg Asn Trp Ala Ser Trp Arg Ile Ser Val  
1 5 10 15

Val

<210> 4899  
<211> 24  
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<220>  
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4899  
Met Val Ile Ile Phe Ile Leu Tyr Ile Leu Cys Ile Pro Val Ile Lys  
1 5 10 15

Cys Arg Val Leu Xaa Ser Ile Ile  
20

<210> 4900  
<211> 6  
<212> PRT  
<213> Homo sapiens

<400> 4900  
Ile Val Leu Trp Leu Gln  
1 5

<210> 4901  
<211> 41  
<212> PRT  
<213> Homo sapiens

<400> 4901  
Met Glu Ile Ser Ala Val Thr Leu Gly Leu Leu Ile Arg Ser Val Trp  
1 5 10 15

Gly Gly Ala Gln Glu Ser Ala Phe Leu Ile Arg Ser Pro Ala Pro Leu  
20 25 30







<210> 4906  
<211> 17  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (12)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4906  
Met Leu Ser Gly Trp Leu Phe Trp Leu Leu Trp Xaa Ser Cys Ile Ser  
1 5 10 15

Arg

<210> 4907  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 4907  
Met Phe Leu Ala Val Leu Leu Leu Ile Leu Met Leu Phe Leu Ile Leu  
1 5 10 15

Val Tyr His Gln Val Tyr Ile Ser His Gly Glu Lys Lys Ile Gly Leu  
20 25 30

Met Tyr Gln Gly Pro  
35

<210> 4908  
<211> 33  
<212> PRT  
<213> Homo sapiens

<400> 4908  
Met Val Glu Asp Gln Glu Met His Leu Thr Ser Ser Val Met Pro Asp  
1 5 10 15

Met Val Ser His Phe Gly Phe Leu Gly Ala Ile Gly Trp Glu Lys Pro  
20 25 30

Glu

<210> 4909  
<211> 44  
<212> PRT  
<213> Homo sapiens

<400> 4909  
Met Phe Phe Gly Leu Leu Leu Met Ile Leu Phe Thr Leu Cys Gln Ile  
1 5 10 15



Leu Ser Cys Arg Leu Phe Tyr Asn Ser Thr Phe Lys Lys Asn Val Tyr  
 20 25 30

Ala Asn Leu Leu Ser Ile Phe Met Ser Ile Phe Ile  
 35 40

<210> 4910  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 4910  
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 1 5 10 15  
 Phe Thr Phe Thr Gly Gly Pro Leu Met Thr Thr Ala Pro Ser Thr  
 20 25 30

<210> 4911  
 <211> 35  
 <212> PRT  
 <213> Homo sapiens

<400> 4911  
 Met Ser Trp Cys Leu Asp Leu Arg Thr Thr Gln Arg Thr Leu Thr Ile  
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 Pro Ala Leu Val His Thr Thr Gln Arg Arg Ser His Arg Gln Lys Leu  
 20 25 30

Pro Gly Gln  
 35

<210> 4912  
 <211> 322  
 <212> PRT  
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<400> 4912  
 Met Glu Ala Ser Ala Ala Ala Val Phe Ser His Phe Ile Met Lys Phe  
 1 5 10 15

Pro Trp Gln Trp Ala Phe Leu Leu Gly Phe Val Leu Gly Ala Val Ser  
 20 25 30

Pro Ala Val Val Val Pro Tyr Met Met Val Leu Gln Glu Asn Gly Tyr  
 35 40 45

Gly Val Glu Glu Gly Ile Pro Thr Leu Leu Met Ala Ala Ser Ser Met  
 50 55 60

Asp Asp Ile Leu Ala Ile Thr Gly Phe Asn Thr Cys Leu Ser Ile Val  
 65 70 75 80







Table 1. Demographic characteristics of the study population	
Age (years)	Mean (SD)
Male	55.2 (10.5)
Female	56.8 (11.2)
Marital status	
Married	78.5%
Single	21.5%
Education (years)	Mean (SD)
Male	12.5 (2.5)
Female	11.8 (2.8)
Occupation	
Professional	35.2%
Managerial	28.7%
Skilled	15.3%
Unskilled	10.8%
Retired	9.0%
Income (USD/month)	Mean (SD)
Male	1,250 (350)
Female	1,180 (320)
Health status	
Good	65.4%
Fair	25.8%
Poor	8.8%
Smoking status	
Smoker	32.1%
Non-smoker	67.9%
Alcohol consumption	
Regular	12.5%
Occasional	28.3%
Never	59.2%
Family size	Mean (SD)
Male	3.2 (1.5)
Female	3.5 (1.8)
Number of children	Mean (SD)
Male	2.1 (1.2)
Female	2.3 (1.4)
Number of grandchildren	Mean (SD)
Male	1.5 (1.0)
Female	1.8 (1.2)
Number of siblings	Mean (SD)
Male	2.5 (1.5)
Female	2.8 (1.8)
Number of nephews/nieces	Mean (SD)
Male	1.2 (0.8)
Female	1.5 (1.0)
Number of friends	Mean (SD)
Male	5.5 (3.5)
Female	6.2 (4.0)
Number of pets	Mean (SD)
Male	1.8 (1.2)
Female	2.1 (1.5)
Number of hobbies	Mean (SD)
Male	3.5 (2.5)
Female	4.2 (3.0)
Number of travel days	Mean (SD)
Male	10.5 (5.5)
Female	12.2 (6.0)
Number of visits to family	Mean (SD)
Male	15.5 (8.5)
Female	18.2 (9.5)
Number of visits to friends	Mean (SD)
Male	12.5 (6.5)
Female	14.8 (7.5)
Number of visits to pets	Mean (SD)
Male	8.5 (4.5)
Female	9.8 (5.5)
Number of visits to hobbies	Mean (SD)
Male	6.5 (3.5)
Female	7.8 (4.5)
Number of visits to travel	Mean (SD)
Male	4.5 (2.5)
Female	5.2 (3.0)
Number of visits to family (continued)	Mean (SD)
Male	15.5 (8.5)
Female	18.2 (9.5)
Number of visits to friends (continued)	Mean (SD)
Male	12.5 (6.5)
Female	14.8 (7.5)
Number of visits to pets (continued)	Mean (SD)
Male	8.5 (4.5)
Female	9.8 (5.5)
Number of visits to hobbies (continued)	Mean (SD)
Male	6.5 (3.5)
Female	7.8 (4.5)
Number of visits to travel (continued)	Mean (SD)
Male	4.5 (2.5)
Female	5.2 (3.0)
Number of visits to family (continued)	Mean (SD)
Male	15.5 (8.5)
Female	18.2 (9.5)
Number of visits to friends (continued)	Mean (SD)
Male	12.5 (6.5)
Female	14.8 (7.5)
Number of visits to pets (continued)	Mean (SD)
Male	8.5 (4.5)
Female	9.8 (5.5)
Number of visits to hobbies (continued)	Mean (SD)
Male	6.5 (3.5)
Female	7.8 (4.5)
Number of visits to travel (continued)	Mean (SD)
Male	4.5 (2.5)
Female	5.2 (3.0)
Number of visits to family (continued)	Mean (SD)
Male	15.5 (8.5)
Female	18.2 (9.5)
Number of visits to friends (continued)	Mean (SD)
Male	12.5 (6.5)
Female	14.8 (7.5)
Number of visits to pets (continued)	Mean (SD)
Male	8.5 (4.5)
Female	9.8 (5.5)
Number of visits to hobbies (continued)	Mean (SD)
Male	6.5 (3.5)
Female	7.8 (4.5)
Number of visits to travel (continued)	Mean (SD)
Male	4.5 (2.5)
Female	5.2 (3.0)
Number of visits to family (continued)	Mean (SD)
Male	15.5 (8.5)
Female	18.2 (9.5)
Number of visits to friends (continued)	Mean (SD)
Male	12.5 (6.5)
Female	14.8 (7.5)
Number of visits to pets (continued)	Mean (SD)
Male	8.5 (4.5)
Female	9.8 (5.5)
Number of visits to hobbies (continued)	Mean (SD)
Male	6.5 (3.5)
Female	7.8 (4.5)
Number of visits to travel (continued)	Mean (SD)
Male	4.5 (2.5)
Female	5.2 (3.0)
Number of visits to family (continued)	Mean (SD)
Male	15.5 (8.5)
Female	18.2 (9.5)
Number of visits to friends (continued)	Mean (SD)
Male	12.5 (6.5)
Female	14.8 (7.5)
Number of visits to pets (continued)	Mean (SD)
Male	8.5 (4.5)
Female	9.8 (5.5)
Number of visits to hobbies (continued)	Mean (SD)
Male	6.5 (3.5)
Female	7.8 (4.5)
Number of visits to travel (continued)	Mean (SD)
Male	4.5 (2.5)
Female	5.2 (3.0)
Number of visits to family (continued)	Mean (SD)
Male	15.5 (8.5)
Female	18.2 (9.5)
Number of visits to friends (continued)	Mean (SD)

Asp Leu Glu Met Lys  
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<210> 4915
<211> 142
<212> PRT
<213> Homo sapiens

<220>
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<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids
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<210> 4916















[illegible]

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<210> 4927
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<212> PRT
<213> Homo sapiens
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<210> 4928
<211> 22
<212> PRT
<213> Homo sapiens
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<210> 4929
<211> 39
<212> PRT
<213> Homo sapiens
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<210> 4930
<211> 44
<212> PRT
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[illegible]

Ser Arg Lys Ala Ser Val Leu Ser Ser Ala Leu Cys  
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Gly Ile Pro Glu Ile Gly  
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Arg Ala Ser Cys Phe Pro Ser Val Arg Ile Pro  
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Ser Gly Pro Gln  
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<211> 32



<212> PRT  
<213> Homo sapiens

<400> 4934  
Met Phe Leu Leu Phe Leu Arg Ser Leu Pro Tyr Ile Leu Cys Ile Val  
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Lys Pro Phe Leu Lys Ser Asn Asp Leu Gly Lys Pro Thr Leu Val Cys  
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<210> 4935  
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<400> 4935  
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1 5 10

<210> 4936  
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<212> PRT  
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<400> 4936  
Met Cys Trp Leu Ala Ala Lys Asn Leu Leu Glu Cys Lys Tyr Ala Ser  
1 5 10 15  
Leu His His Leu  
20

<210> 4937  
<211> 39  
<212> PRT  
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<400> 4937  
Met Trp Leu Lys Ile Gly Phe Leu Ser Ile Phe Ser Leu Val Leu Phe  
1 5 10 15  
Tyr Lys Thr Ser Leu Ser Thr Tyr His Val Pro Tyr Ser Leu Val Gly  
20 25 30  
Pro Glu Asp Lys Glu Met Tyr  
35

<210> 4938  
<211> 12  
<212> PRT  
<213> Homo sapiens



<400> 4938

Met Ala Ala Ser Met His Gln Cys Phe Pro Leu Thr  
1 5 10

<210> 4939

<211> 37

<212> PRT

<213> Homo sapiens

<400> 4939

Met Met Cys Phe Leu Gly Ala Gly Cys Ile Glu Phe Lys Thr Trp Thr  
1 5 10 15

Met Ala Trp Ile Ala Trp Val Gln Ile Leu Pro Leu Leu Tyr His Phe  
20 25 30

Arg Gln Ala Gly Pro  
35

<210> 4940

<211> 23

<212> PRT

<213> Homo sapiens

<400> 4940

Met Glu Val Gly Val Ser Leu Leu Cys Arg Ile Trp Asp Trp Ala Asn  
1 5 10 15

Val Cys Val Ala Ser Leu Asn  
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<210> 4941

<211> 7

<212> PRT

<213> Homo sapiens

<400> 4941

Ser Phe Lys Leu Leu Ile Thr  
1 5

<210> 4942

<211> 72

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4942

Met Pro Ala Cys Gly Ser Leu Pro Pro Arg Ala His Gln Pro Trp Cys



1 5 10 15  
 Pro Ala Gly Leu Leu Gln Ser Leu Val Leu Glu Gln Leu Leu Glu Phe  
 20 25 30  
 Ser Ala Ala Ser Ser Pro Gln Pro Ser Arg Xaa Ser Glu Leu Leu Pro  
 35 40 45  
 Gly Gln His Leu Leu Gly Pro Val Leu Arg Pro His Gly Ala Gly Leu  
 50 55 60  
 Met Trp Glu Leu Ile Leu Ala Gly  
 65 70

<210> 4943  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 4943  
 Met Ala Phe Leu Lys Gly Trp Leu Pro Phe Cys Trp Ser Gln Arg Ser  
 1 5 10 15  
 Ile His Ser Tyr Leu  
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<210> 4944  
 <211> 80  
 <212> PRT  
 <213> Homo sapiens

<400> 4944  
 Ile Gly His Ile Met Leu Leu Val Phe Pro Lys Cys Leu Val Ile Phe  
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 Tyr Cys Ser Phe Asn Tyr Arg Leu His Phe Phe Val Cys Leu Phe Leu  
 20 25 30  
 Leu Ser Ser Gln Met Leu Pro Asn Met Ala Ala Ser Asn Pro Glu Phe  
 35 40 45  
 Asn Pro Gly Thr Ile Leu Gln Thr Ala Gln Phe Ser Ser Glu Trp Ala  
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 Ile Cys Ile Pro Thr His Gln Ser Tyr Tyr Leu Lys Asn Tyr Ile Phe  
 65 70 75 80

<210> 4945  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens



[illegible]

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<210> 4946
<211> 43
<212> PRT
<213> Homo sapiens
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<400> 4946
Met Cys Val Cys Val Tyr Ile Tyr Ile Tyr Val Tyr Ile Tyr Val Tyr
  1                      5                      10                      15

Ile Cys Ile Tyr Val Tyr Ile Asn Gln Asn Glu Lys Pro Phe Trp Ile
          20                      25                      30

Leu Arg Ala Thr Lys Phe Arg Glu Val Ile Ser
      35                      40

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<210> 4947
<211> 45
<212> PRT
<213> Homo sapiens
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<400> 4947
Met Phe Tyr Asn Phe Leu Leu Ile Phe Ile Phe Leu Val Cys Gln Ser
  1             5             10             15

Ser Pro Leu Thr Ser His Ile Tyr Leu Cys Cys Ile Leu Ala Trp Cys
          20             25             30

Leu Ala Trp Arg Arg His Trp Asn Ile Gly Lys Asn Glu
      35             40             45

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<211> 23
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>

<221> SITE .

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4948

Gly Pro Gly Xaa Glu Val Ile Glu Ser Trp Glu Pro Ser Leu Xaa Leu  
1 5 10 15

Cys Cys Ser Gly Gly Gly Glu  
20

<210> 4949

<211> 92

<212> PRT

<213> Homo sapiens

<400> 4949

Met Pro Phe Gln Phe Pro Lys Lys Ala Arg Leu Val Pro Leu Leu Gly  
1 5 10 15

Leu Cys Leu Glu Tyr Ser Gln Thr Leu Ser Arg Ala Pro Ala Trp Met  
20 25 30

Ser Val Ser Arg Gly Pro Pro His Ser Thr Trp Ile Lys Ala Gly Leu  
35 40 45

Pro Gly Ala Leu His His Thr Pro Phe Pro Pro Ser Ala Cys Leu Ala  
50 55 60

Arg Pro Ala Arg Ser Phe His Asp Gly Arg Ala Trp Pro Leu Leu His  
65 70 75 80

Ala Met Gln Ala Trp Pro Leu Pro Thr Thr Gly Pro  
85 90

<210> 4950

<211> 27

<212> PRT

<213> Homo sapiens

<400> 4950

Met Phe Tyr Trp Gln Arg Leu Gly Leu Ala Leu Leu Ala Ser Val Leu  
1 5 10 15

Gly Phe Phe Leu Cys Thr Ala Asp Trp Leu Ser  
20 25

<210> 4951

<211> 33

<212> PRT

<213> Homo sapiens

<400> 4951



Met Leu Thr Thr Tyr Trp Val Leu Cys Ser Leu Pro Ile Gly Tyr Cys  
1 5 10 15

Ala His Tyr Leu Leu Gly Thr Leu Val Thr Ala Ser Tyr Asn Ile Pro  
20 25 30

Met

<210> 4952  
<211> 190  
<212> PRT  
<213> Homo sapiens

<400> 4952  
Ile Ala Leu Arg Leu Thr Leu Leu Pro Ala Ser Ser Ala Ala Leu His  
1 5 10 15

Leu Arg Arg Ser Pro Val Cys Leu Gln Leu Leu Pro Arg Gln Leu Ile  
20 25 30

Lys Gln Pro Val Arg Leu Met Phe Thr Lys Val Lys Leu Glu Gln Val  
35 40 45

Leu Lys Gly Pro Glu Glu Ala Leu Val Thr Cys Arg Gln Val Leu Arg  
50 55 60

Leu Trp Gln Thr Leu Tyr Ser Phe Ser Gln Leu Gly Gly Leu Glu Lys  
65 70 75 80

Asp Gly Ser Phe Gly Glu Gly Leu Thr Met Lys Lys Gln Ser Gly Met  
85 90 95

His Leu Thr Leu Pro Asp Ala His Asp Ala Asp Ser Gly Ser Arg Arg  
100 105 110

Ala Ser Ser Ile Ala Ala Ser Arg Leu Glu Glu Ala Met Ser Glu Leu  
115 120 125

Thr Met Pro Ser Ser Val Leu Lys Gln Gly Pro Met Gln Leu Trp Thr  
130 135 140

Thr Leu Glu Gln Ile Trp Leu Gln Ala Ala Glu Leu Phe Met Glu Gln  
145 150 155 160

Gln His Leu Lys Glu Ala Gly Phe Cys Thr Gly Gly Gly Gly Pro Leu  
165 170 175

Pro His Phe Ser Leu Ser Thr Leu Tyr Ala Gly Pro Ala Gly  
180 185 190

<210> 4953  
<211> 194  
<212> PRT  
<213> Homo sapiens

<400> 4953



Met Cys Gly Ser Cys Trp Ala Phe Ser Val Thr Gly Asn Val Glu Gly  
 1 5 10 15  
 Gln Trp Phe Leu Asn Gln Gly Thr Leu Leu Ser Leu Ser Glu Gln Glu  
 20 25 30  
 Leu Leu Asp Cys Asp Lys Met Asp Lys Ala Cys Met Gly Gly Leu Pro  
 35 40 45  
 Ser Asn Ala Tyr Ser Ala Ile Lys Asn Leu Gly Gly Leu Glu Thr Glu  
 50 55 60  
 Asp Asp Tyr Ser Tyr Gln Gly His Met Gln Ser Cys Asn Phe Ser Ala  
 65 70 75 80  
 Glu Lys Ala Lys Val Tyr Ile Asn Asp Ser Val Glu Leu Ser Gln Asn  
 85 90 95  
 Glu Gln Lys Leu Ala Ala Trp Leu Ala Lys Arg Gly Pro Ile Ser Val  
 100 105 110  
 Ala Ile Asn Ala Phe Gly Met Gln Phe Tyr Arg His Gly Ile Ser Arg  
 115 120 125  
 Pro Leu Arg Pro Leu Cys Ser Pro Trp Leu Ile Asp His Ala Val Leu  
 130 135 140  
 Leu Val Gly Tyr Gly Asn Arg Ser Asp Val Pro Phe Trp Ala Ile Lys  
 145 150 155 160  
 Asn Ser Trp Gly Thr Asp Trp Gly Glu Lys Gly Tyr Tyr Tyr Leu His  
 165 170 175  
 Arg Gly Ser Gly Ala Cys Gly Val Asn Thr Met Ala Ser Ser Ala Val  
 180 185 190  
 Val Asp

<210> 4954  
 <211> 232  
 <212> PRT  
 <213> Homo sapiens

<400> 4954  
 Met Leu Ser Thr His Asn Leu Pro Cys Leu Leu Val Glu Leu Leu Glu  
 1 5 10 15  
 His Ser Pro Trp Ser Arg Arg Glu Gly Gly Lys Leu Gln Gln Phe Glu  
 20 25 30  
 Gly Ser Arg Trp His Thr Val Ala Pro Ser Glu Gln Gln Lys Leu Ser  
 35 40 45  
 Lys Leu Asp Gly Gln Val Trp Ile Ala Leu Tyr Asn Leu Leu Leu Ser  
 50 55 60  
 Pro Glu Ala Gln Ala Arg Tyr Cys Leu Thr Ser Phe Ala Lys Gly Arg  
 65 70 75 80



Leu Leu Lys Leu Arg Ala Phe Leu Thr Asp Thr Leu Leu Asp Gln Leu  
85 90 95

Pro Asn Leu Ala His Leu Gln Ser Phe Leu Ala His Leu Thr Leu Thr  
100 105 110

Glu Thr Gln Pro Pro Lys Lys Asp Leu Val Leu Glu Gln Ile Pro Glu  
115 120 125

Ile Trp Glu Arg Leu Glu Arg Glu Asn Arg Gly Lys Trp Gln Ala Ile  
130 135 140

Ala Lys His Gln Leu Gln His Val Phe Ser Pro Ser Glu Gln Asp Leu  
145 150 155 160

Arg Leu Gln Ala Arg Arg Trp Ala Glu Thr Tyr Arg Leu Asp Val Leu  
165 170 175

Glu Ala Val Ala Pro Glu Arg Pro Arg Cys Ala Tyr Cys Ser Ala Glu  
180 185 190

Ala Ser Lys Arg Cys Ser Arg Cys Gln Asn Glu Trp Tyr Cys Cys Arg  
195 200 205

Glu Cys Gln Val Lys His Trp Glu Lys His Gly Lys Thr Cys Val Leu  
210 215 220

Ala Ala Gln Gly Asp Arg Ala Lys  
225 230

<210> 4955  
<211> 75  
<212> PRT  
<213> Homo sapiens

<400> 4955  
Trp Val Ser Leu Cys Thr Leu Ala Ser Val Leu Leu Gly Ala Gly Ala  
1 5 10 15

Val Ser His Ala Arg Ala Cys Glu Gly Thr Thr Gly Val Asn Glu Ser  
20 25 30

Pro Met Met Thr Trp Gly Glu Val Glu Asn Thr Pro Leu Arg Val Glu  
35 40 45

Gly Ser Glu Thr Pro Tyr Val Asp Arg Thr Pro Gly Pro Ala Phe Lys  
50 55 60

Ile Leu Glu Pro Gly Arg Arg Asn Gly Trp Val  
65 70 75

<210> 4956  
<211> 49  
<212> PRT  
<213> Homo sapiens







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Pro Met Arg Leu Gln Ala His Val Leu Gly Gln Leu Lys Pro Val Cys  
85 90 95  
Tyr Val Ala Pro Ser Leu Cys Asp Thr His Val Gly Cys Leu Ser Ala  
100 105 110  
Ser Asp Lys Leu Ala Arg Trp Ala Val Leu Gly Leu Gly Gly Ala Leu  
115 120 125  
Leu Ala His Leu Val Ser Pro Leu Tyr Ser Thr Ser Leu Ile Leu Val  
130 135 140  
Pro Pro Trp Gly Leu Pro Pro Val Ser Ala Arg Pro Pro Phe Ser Gly  
145 150 155 160  
Pro Phe Thr Arg Arg Pro Gly Leu Trp Gly Ser Pro Thr Ser Trp Pro  
165 170 175

<210> 4959  
<211> 8  
<212> PRT  
<213> Homo sapiens

<400> 4959  
Met Ser Glu Gly Leu Leu Cys Leu  
1 5

<210> 4960  
<211> 170  
<212> PRT  
<213> Homo sapiens

<400> 4960  
Met Ile Leu Thr Met Leu Leu Met Leu Lys Leu Cys Thr Glu Val Arg  
1 5 10 15  
Val Ala Asn Glu Leu Asn Ala Arg Arg Arg Ser Phe Thr Asp Phe Asp  
20 25 30  
Pro His His Phe Trp Gln Trp Ser Ser Phe Ser Asp Tyr Val Gln Cys  
35 40 45  
Val Leu Ala Phe Thr Gly Val Ala Gly Tyr Ile Thr Tyr Leu Ser Ile  
50 55 60  
Asp Ser Ala Leu Phe Val Glu Thr Leu Gly Phe Leu Ala Val Leu Thr  
65 70 75 80  
Glu Ala Met Leu Gly Val Pro Gln Leu Tyr Arg Asn His Arg His Gln  
85 90 95  
Ser Thr Glu Gly Met Ser Ile Lys Met Val Leu Met Trp Thr Ser Gly  
100 105 110



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Asp Ala Phe Lys Thr Ala Tyr Phe Leu Leu Lys Gly Ala Pro Leu Gln  
115 120 125

Phe Ser Val Cys Gly Leu Leu Gln Val Leu Val Asp Leu Ala Ile Leu  
130 135 140

Gly Gln Ala Tyr Ala Phe Ala Arg His Pro Gln Lys Pro Ala Pro His  
145 150 155 160

Ala Val His Pro Thr Gly Thr Lys Ala Leu  
165 170

<210> 4961

<211> 13

<212> PRT

<213> Homo sapiens

<400> 4961

Met Ala Ser Leu Cys Ser Cys Leu Thr Ala Leu Met Cys  
1 5 10

<210> 4962

<211> 13

<212> PRT

<213> Homo sapiens

<400> 4962

Met Ala Ser Leu Cys Ser Cys Leu Thr Ala Leu Met Cys  
1 5 10

<210> 4963

<211> 152

<212> PRT

<213> Homo sapiens

<400> 4963

Met Gln Gly Thr Pro Gly Gly Gly Thr Arg Pro Gly Pro Ser Pro Val  
1 5 10 15

Asp Arg Arg Thr Leu Leu Val Phe Ser Phe Ile Leu Ala Ala Ala Leu  
20 25 30

Gly Gln Met Asn Phe Thr Gly Asp Gln Val Leu Arg Val Leu Ala Lys  
35 40 45

Asp Glu Lys Gln Leu Ser Leu Leu Gly Asp Leu Glu Gly Leu Lys Pro  
50 55 60

Gln Lys Val Asp Phe Trp Arg Gly Pro Ala Arg Pro Ser Leu Pro Val  
65 70 75 80

Asp Met Arg Val Pro Phe Ser Glu Leu Lys Asp Ile Lys Ala Tyr Leu  
85 90 95



Glu Ser His Gly Leu Ala Tyr Ser Ile Met Ile Lys Asp Ile Gln Val  
100 105 110

Leu Leu Asp Glu Glu Arg Gln Ala Met Ala Lys Ser Arg Arg Leu Glu  
115 120 125

Arg Ser Thr Asn Ser Phe Ser Tyr Ser Ser Tyr His Thr Leu Glu Arg  
130 135 140

Tyr Ile Ala Gly Leu Thr Thr Leu  
145 150

<210> 4964

<211> 75

<212> PRT

<213> Homo sapiens

<400> 4964

Met Ser Ser Trp Leu Arg Val Val Asn Ala Ala Ile Ala Thr Ala Ser  
1 5 10 15

Ser Ala Ser Gly Glu Pro Glu Glu Pro Val Val Pro Ser Thr Thr Arg  
20 25 30

Gly Met Thr Arg Ala Met Thr Met Pro Pro Val Ser Pro Val Gly Ala  
35 40 45

Glu Gly Pro Val Val Leu Arg Ser Lys Asp Gly Arg Glu Arg Glu Arg  
50 55 60

Glu Lys Arg Phe Ser Phe Phe Lys Lys Asn Lys  
65 70 75

<210> 4965

<211> 35

<212> PRT

<213> Homo sapiens

<400> 4965

Met Trp Leu Ile Ala Pro Leu Cys Leu Leu Pro Val Ser Val Ala Gly  
1 5 10 15

Glu Leu Asn Arg Ala Leu Gly Leu Ser Ser Leu Cys Gly Glu Thr Asp  
20 25 30

Ile Tyr Gln  
35

<210> 4966

<211> 314

<212> PRT

<213> Homo sapiens

<400> 4966

Met Val Lys Leu Leu Val Ala Lys Ile Leu Cys Met Val Gly Val Phe



1	5						10						15			
Phe	Phe	Met	Leu 20	Leu	Gly	Ser	Leu	Leu 25	Pro	Val	Lys	Ile	Ile 30	Glu	Thr	
Asp	Phe	Glu 35	Lys	Ala	His	Arg	Ser 40	Lys	Lys	Ile	Leu	Ser 45	Leu	Cys	Asn	
Thr	Phe 50	Gly	Gly	Gly	Val	Phe 55	Leu	Ala	Thr	Cys	Phe 60	Asn	Ala	Leu	Leu	
Pro 65	Ala	Val	Arg	Glu	Lys 70	Leu	Gln	Lys	Val	Leu 75	Ser	Leu	Gly	His	Ile 80	
Ser	Thr	Asp	Tyr	Pro 85	Leu	Ala	Glu	Thr	Ile 90	Leu	Leu	Leu	Gly	Phe 95	Phe	
Met	Thr	Val	Phe 100	Leu	Glu	Gln	Leu	Ile 105	Leu	Thr	Phe	Arg	Lys 110	Glu	Lys	
Pro	Ser	Phe 115	Ile	Asp	Leu	Glu	Thr 120	Phe	Asn	Ala	Gly	Ser 125	Asp	Val	Gly	
Ser	Asp 130	Ser	Glu	Tyr	Glu	Ser 135	Pro	Phe	Met	Gly	Gly 140	Ala	Arg	Gly	His	
Ala 145	Leu	Tyr	Val	Glu	Pro 150	His	Gly	His	Gly	Pro 155	Ser	Leu	Ser	Val	Gln 160	
Gly	Leu	Ser	Arg	Ala 165	Ser	Pro	Val	Arg	Leu 170	Leu	Ser	Leu	Ala	Phe 175	Ala	
Leu	Ser	Ala	His 180	Ser	Val	Phe	Glu	Gly 185	Leu	Ala	Leu	Gly	Leu 190	Gln	Glu	
Glu	Gly	Glu 195	Lys	Val	Val	Ser	Leu 200	Phe	Val	Gly	Val	Ala 205	Val	His	Glu	
Thr	Leu 210	Val	Ala	Val	Ala	Leu 215	Gly	Ile	Ser	Met	Ala 220	Arg	Ser	Ala	Met	
Pro 225	Leu	Arg	Asp	Ala	Ala 230	Lys	Leu	Ala	Val	Thr 235	Val	Ser	Ala	Met	Ile 240	
Pro	Leu	Gly	Ile	Gly 245	Leu	Gly	Leu	Gly	Ile 250	Glu	Ser	Ala	Gln	Gly 255	Val	
Pro	Gly	Ser	Val 260	Ala	Ser	Val	Leu 265	Leu	Gln	Gly	Leu	Ala 270	Gly	Gly	Thr	
Phe	Leu	Phe 275	Ile	Thr	Phe	Leu	Glu 280	Ile	Leu	Ala	Lys	Glu 285	Leu	Glu	Glu	
Lys	Ser 290	Asp	Arg	Leu	Leu	Lys 295	Val	Leu	Phe	Leu	Val 300	Leu	Gly	Tyr	Thr	
Val 305	Leu	Ala	Gly	Met	Val 310	Phe	Leu	Lys	Trp							



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Pro Ser Pro Ala Arg Ser Ala Pro Ala Trp Cys Pro Gly Lys Arg Cys  
 245 250 255  
 Arg Cys Ala Pro Pro Pro Ala Thr Gly Ala Glu Val Val Leu Ser Leu  
 260 265 270  
 Ala Ala Cys Arg Gly Val Pro Gly Pro Thr Ala Glu Gly Ala Gly Lys  
 275 280 285  
 Gly Asp Ser Ala Lys Thr Ala Leu Leu Lys Lys Lys Lys Lys Lys  
 290 295 300

<210> 4971  
 <211> 187  
 <212> PRT  
 <213> Homo sapiens

<400> 4971  
 Met Gly Lys Glu Ala Ala Asp Leu Leu Leu Leu Leu Leu Pro Val Ala  
 1 5 10 15  
 Ser Ser Gly Cys Gln Glu Arg Gly Arg Thr Phe Val Trp Ala Leu Pro  
 20 25 30  
 Arg Ala Gly Asn Phe Thr Trp Tyr Leu Lys Val Ser Phe Gly Ile Arg  
 35 40 45  
 Pro Glu Thr Leu Gly Phe Ser Arg Leu Thr Thr Pro Phe Tyr Ser Lys  
 50 55 60  
 His Leu Glu Asp Cys Phe Arg Val Ser Gln Gly Pro Ser Val Pro Ser  
 65 70 75 80  
 Ala Val Glu Cys Arg Thr Leu Cys Asp Ile Leu Tyr Pro Phe Phe Pro  
 85 90 95  
 Gly Leu Val Ala Met Glu Gly Leu Val Cys Cys Asp Ser Thr Leu Asp  
 100 105 110  
 Ala Val Ser Leu Met Leu Ala Arg Glu Ala Glu Asp Val Arg Gly Arg  
 115 120 125  
 Gly Arg Leu Leu Gly Leu Ser Ser Phe Leu Cys Ile Ile Leu Gly Leu  
 130 135 140  
 Ala Trp Thr Ala Pro Ala Ser Glu Ser Cys Gly Pro His Pro Leu Ala  
 145 150 155 160  
 Ala Glu Pro Ser Thr Val Ile Leu Gly Ala Ile Phe Pro Cys Arg Thr  
 165 170 175  
 Gly Ser Leu Ser Pro Ala Pro Thr Phe Gly Leu  
 180 185

<210> 4972  
 <211> 187



<212> PRT  
<213> Homo sapiens

<400> 4972

Met Gly Lys Glu Ala Ala Asp Leu Leu Leu Leu Leu Leu Pro Val Ala  
1 5 10 15  
Ser Ser Gly Cys Gln Glu Arg Gly Arg Thr Phe Val Trp Ala Leu Pro  
20 25 30  
Arg Ala Gly Asn Phe Thr Trp Tyr Leu Lys Val Ser Phe Gly Ile Arg  
35 40 45  
Pro Glu Thr Leu Gly Phe Ser Arg Leu Thr Thr Pro Phe Tyr Ser Lys  
50 55 60  
His Leu Glu Asp Cys Phe Arg Val Ser Gln Gly Pro Ser Val Pro Ser  
65 70 75 80  
Ala Val Glu Cys Arg Thr Leu Cys Asp Ile Leu Tyr Pro Phe Phe Pro  
85 90 95  
Gly Leu Val Ala Met Glu Gly Leu Val Cys Cys Asp Ser Thr Leu Asp  
100 105 110  
Ala Val Ser Leu Met Leu Ala Arg Glu Ala Glu Asp Val Arg Gly Arg  
115 120 125  
Gly Arg Leu Leu Gly Leu Ser Ser Phe Leu Cys Ile Ile Leu Gly Leu  
130 135 140  
Ala Trp Thr Ala Pro Ala Ser Glu Ser Cys Gly Pro His Pro Leu Ala  
145 150 155 160  
Ala Glu Pro Ser Thr Val Ile Leu Gly Ala Ile Phe Pro Cys Arg Thr  
165 170 175  
Gly Ser Leu Ser Pro Ala Pro Thr Phe Gly Leu  
180 185

<210> 4973  
<211> 187  
<212> PRT  
<213> Homo sapiens

<400> 4973

Met Gly Lys Glu Ala Ala Asp Leu Leu Leu Leu Leu Leu Pro Val Ala  
1 5 10 15  
Ser Ser Gly Cys Gln Glu Arg Gly Arg Thr Phe Val Trp Ala Leu Pro  
20 25 30  
Arg Ala Gly Asn Phe Thr Trp Tyr Leu Lys Val Ser Phe Gly Ile Arg  
35 40 45  
Pro Glu Thr Leu Gly Phe Ser Arg Leu Thr Thr Pro Phe Tyr Ser Lys  
50 55 60  
His Leu Glu Asp Cys Phe Arg Val Ser Gln Gly Pro Ser Val Pro Ser











Ser Trp Gly Val Gly Cys Gly Arg Pro Asn Arg Pro Gly Val Tyr Thr  
260 265 270

Asn Ile Ser His His Phe Glu Trp Ile Gln Lys Leu Met Ala Gln Ser  
275 280 285

Gly Met Ser Gln Pro Asp Pro Ser Trp Pro Leu Leu Phe Phe Pro Leu  
290 295 300

Leu Trp Ala Leu Pro Leu Leu Gly Pro Val  
305 310

<210> 4976  
<211> 240  
<212> PRT  
<213> Homo sapiens

<400> 4976  
Met Gly Asn Cys Gln Ala Gly His Asn Leu His Leu Cys Leu Ala His  
1 5 10 15

His Pro Pro Leu Val Cys Ala Thr Leu Ile Leu Leu Leu Gly Leu  
20 25 30

Ser Gly Leu Gly Leu Gly Ser Phe Leu Leu Thr His Arg Thr Gly Leu  
35 40 45

Arg Ser Pro Asp Ile Pro Gln Asp Trp Val Ser Phe Leu Arg Ser Phe  
50 55 60

Gly Gln Leu Thr Leu Cys Pro Arg Asn Gly Thr Val Thr Gly Lys Trp  
65 70 75 80

Arg Gly Ser His Val Val Gly Leu Leu Thr Thr Leu Asn Phe Gly Asp  
85 90 95

Gly Pro Asp Arg Asn Lys Thr Arg Thr Phe Gln Ala Thr Val Leu Gly  
100 105 110

Ser Gln Met Gly Leu Lys Gly Ser Ser Ala Gly Gln Leu Val Leu Ile  
115 120 125

Thr Ala Arg Val Thr Thr Glu Arg Thr Ala Gly Thr Cys Leu Tyr Phe  
130 135 140

Ser Ala Val Pro Gly Ile Leu Pro Ser Ser Gln Pro Pro Ile Ser Cys  
145 150 155 160

Ser Glu Glu Gly Ala Gly Asn Ala Thr Leu Ser Pro Arg Met Gly Glu  
165 170 175

Glu Cys Val Ser Val Trp Ser His Glu Gly Leu Val Leu Thr Lys Leu  
180 185 190

Leu Thr Ser Glu Glu Leu Ala Leu Cys Gly Ser Arg Leu Leu Val Leu  
195 200 205

Gly Ser Phe Leu Leu Leu Phe Cys Gly Leu Leu Cys Cys Val Thr Ala



210

215

220

Met Cys Phe His Pro Arg Arg Glu Ser His Trp Ser Arg Thr Arg Leu  
 225 230 235 240

&lt;210&gt; 4977

&lt;211&gt; 31

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4977

Met Cys Ile Cys Val Leu Ile Leu Ile Cys Ile Phe Thr Asp Phe Ile  
 1 5 10 15

Ile Ser Tyr Val Leu Asn Phe Tyr Leu Trp Arg Lys His Thr Thr  
 20 25 30

&lt;210&gt; 4978

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4978

Met His Leu Ile Ile Phe Phe Ile Ile Leu Cys Thr Asn Ser Ala Cys  
 1 5 10 15

Asn Asn Gln Phe Thr Trp Lys  
 20

&lt;210&gt; 4979

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4979

Met Thr Leu Leu Leu Trp Lys Phe Asn Leu Phe Ile Val Phe Trp Ala  
 1 5 10 15

Leu Trp Val Val Arg Ala Gly Leu Trp Val Leu Gly Asn Ser Ser Gly  
 20 25 30

Ser Gln His Ser Lys Ala Lys Leu Thr Ser Ser Ser His Thr Leu Gln  
 35 40 45

Glu Lys His  
 50

&lt;210&gt; 4980

&lt;211&gt; 51

&lt;212&gt; PRT



<213> Homo sapiens

<400> 4980

Met Thr Leu Leu Leu Trp Lys Phe Asn Leu Phe Ile Val Phe Trp Ala  
1 5 10 15

Leu Trp Val Val Arg Ala Gly Leu Trp Val Leu Gly Asn Ser Ser Gly  
20 25 30

Ser Gln His Ser Lys Ala Lys Leu Thr Ser Ser Ser His Thr Leu Gln  
35 40 45

Glu Lys His  
50

<210> 4981

<211> 51

<212> PRT

<213> Homo sapiens

<400> 4981

Met Thr Leu Leu Leu Trp Lys Phe Asn Leu Phe Ile Val Phe Trp Ala  
1 5 10 15

Leu Trp Val Val Arg Ala Gly Leu Trp Val Leu Gly Asn Ser Ser Gly  
20 25 30

Ser Gln His Ser Lys Ala Lys Leu Thr Ser Ser Ser His Thr Leu Gln  
35 40 45

Glu Lys His  
50

<210> 4982

<211> 51

<212> PRT

<213> Homo sapiens

<400> 4982

Met Thr Leu Leu Leu Trp Lys Phe Asn Leu Phe Ile Val Phe Trp Ala  
1 5 10 15

Leu Trp Val Val Arg Ala Gly Leu Trp Val Leu Gly Asn Ser Ser Gly  
20 25 30

Ser Gln His Ser Lys Ala Lys Leu Thr Ser Ser Ser His Thr Leu Gln  
35 40 45

Glu Lys His  
50

<210> 4983

<211> 28

<212> PRT

<213> Homo sapiens



<400> 4983

His Glu Pro Arg Val Pro Trp Ser Asp Lys Leu Gly Asn Ala Ala Cys  
1 5 10 15

Cys Thr Phe Leu Ser Lys Ile His Val Gln Arg Ile  
20 25

<210> 4984

<211> 15

<212> PRT

<213> Homo sapiens

<400> 4984

Met Arg Glu Val Leu Leu Phe Phe Leu Phe Tyr Thr Arg Gly His  
1 5 10 15

<210> 4985

<211> 51

<212> PRT

<213> Homo sapiens

<400> 4985

Met Pro Ser Glu Ala Phe Val Ile Val Ile Gln Pro Leu Ile Val Ser  
1 5 10 15

Thr Ser Thr Asp His Phe Val Thr Thr Ser Cys Gly Ser Tyr Tyr Ser  
20 25 30

Gln Thr Val Ser Leu Lys Arg Lys Pro Leu Phe Tyr Lys Ser Thr Leu  
35 40 45

Gln Val Phe  
50

<210> 4986

<211> 34

<212> PRT

<213> Homo sapiens

<400> 4986

Met Leu Met Ile Cys Leu Leu Ser Gly Arg Ala Phe Ala Tyr Phe Phe  
1 5 10 15

Ser Asn Tyr Phe Thr Ser Thr Leu Ile Leu Leu Ser Gln Phe Ser Tyr  
20 25 30

Gln His

<210> 4987

<211> 118

<212> PRT



<213> Homo sapiens

<400> 4987

Val Ala Arg Ala Val Cys Leu Val Phe Ala Leu Ile Val Phe Ser Cys  
1 5 10 15

Ile Tyr Gly Glu Gly Tyr Ser Asn Ala His Glu Ser Lys Gln Met Tyr  
20 25 30

Cys Val Phe Asn Arg Asn Glu Asp Ala Cys Arg Tyr Gly Ser Ala Ile  
35 40 45

Gly Val Leu Ala Phe Leu Ala Ser Ala Phe Phe Leu Val Val Asp Ala  
50 55 60

Tyr Phe Pro Gln Ile Ser Asn Ala Thr Asp Arg Lys Tyr Leu Val Ile  
65 70 75 80

Gly Asp Leu Leu Phe Ser Ala Leu Trp Thr Phe Leu Trp Phe Val Gly  
85 90 95

Phe Cys Phe Leu Thr Asn Gln Trp Ala Val Thr Asn Pro Lys Thr Cys  
100 105 110

Trp Trp Gly Pro Thr Leu  
115

<210> 4988

<211> 4

<212> PRT

<213> Homo sapiens

<400> 4988

Cys Thr Leu Leu  
1

<210> 4989

<211> 36

<212> PRT

<213> Homo sapiens

<400> 4989

His Lys Phe Ser Glu Cys Thr Val Tyr Phe Gly Phe Arg Arg Ala Val  
1 5 10 15

Tyr Leu Ser Leu Leu Leu Ala Ser Ser Ala Leu Gln Leu Pro Leu  
20 25 30

Glu Arg Ala Phe  
35

<210> 4990

<211> 62

<212> PRT

<213> Homo sapiens



<400> 4990

Lys Cys Phe His Leu Leu Trp Ser Leu Val Thr Ser Ala Gln Arg Pro  
1 5 10 15

Ser Asp Gly Tyr Phe Phe Glu Ala Phe Ile Tyr Ile Ile Leu Phe Cys  
20 25 30

Thr Met Phe Phe Leu Asn Val Gln Ile Leu Tyr Ser Ser Glu Lys Asn  
35 40 45

Thr Val Phe Val Asp Asn His Ser Tyr Tyr Thr Val Leu Arg  
50 55 60

<210> 4991

<211> 14

<212> PRT

<213> Homo sapiens

<400> 4991

Met Ser Thr Phe Leu Trp Asp Ile Gln Thr Thr Tyr Cys Phe  
1 5 10

<210> 4992

<211> 16

<212> PRT

<213> Homo sapiens

<400> 4992

Leu Thr Leu Pro Tyr Leu Phe Leu Gly Gly Gly Trp Arg Gly Gly Val  
1 5 10 15

<210> 4993

<211> 31

<212> PRT

<213> Homo sapiens

<400> 4993

Met Val Cys Trp Leu Leu Pro Leu Trp Val Thr Val Leu Ser Phe Pro  
1 5 10 15

Val Gly Arg Asp Val Ala Ala Leu Leu Ile Phe Thr Ser Ser Tyr  
20 25 30

<210> 4994

<211> 19

<212> PRT

<213> Homo sapiens

<400> 4994



Leu Ser Leu Leu His Pro Leu Ser Val Pro Pro Gly Ser Leu Glu Gln  
 1 5 10 15

Asp Gly Val

<210> 4995  
 <211> 6  
 <212> PRT  
 <213> Homo sapiens

<400> 4995  
 Gly Asp Val Trp Leu Leu  
 1 5

<210> 4996  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

<400> 4996  
 Met Cys Trp Pro Trp Gly Gly Pro Pro Leu Pro Ser Leu Pro Thr Ser  
 1 5 10 15

Leu Arg Trp Met Ser Leu Cys Tyr  
 20

<210> 4997  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

<400> 4997  
 Met Cys Trp Pro Trp Gly Gly Pro Pro Leu Pro Ser Leu Pro Thr Ser  
 1 5 10 15

Leu Arg Trp Met Ser Leu Cys Tyr  
 20

<210> 4998  
 <211> 46  
 <212> PRT  
 <213> Homo sapiens

<400> 4998  
 Asn Thr Phe Trp His Gly Ser Ser Cys Leu Ser Ile Cys Gln Phe Ser  
 1 5 10 15

Cys Glu Asp Ser Val Tyr Arg Leu Tyr Thr Ala His Val Glu Arg Gly  
 20 25 30

Gln Trp Val Leu Tyr Leu Lys Tyr Val Leu Pro Phe Cys Cys  
 35 40 45



<210> 4999  
 <211> 43  
 <212> PRT  
 <213> Homo sapiens

<400> 4999  
 Met Leu Leu Pro Ile Leu Leu Tyr Ser Phe Leu Tyr Pro Thr Ile Val  
 1 5 10 15  
 Ser Arg Asn Tyr Phe Lys Leu Ile Arg Ser Cys Met Leu Phe Leu Lys  
 20 25 30  
 Lys Lys Lys Lys Lys Glu Arg Lys Ile Ser Val  
 35 40

<210> 5000  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 5000  
 Phe Asn Ser Leu Leu Leu Leu Met Leu Pro Cys Tyr Leu Cys Cys His  
 1 5 10 15  
 Tyr Pro Leu Phe Phe Pro Ser  
 20

<210> 5001  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<400> 5001  
 Met Ser Arg Gly Cys Leu Ser Leu Leu Leu Ile Ile Ile His Phe Leu  
 1 5 10 15  
 Gly Ser His Cys Pro His Leu Phe Ser Leu Glu Leu Arg Phe Ile Phe  
 20 25 30  
 Ile Leu Gln Thr Gly Lys Thr Glu  
 35 40

<210> 5002  
 <211> 14  
 <212> PRT  
 <213> Homo sapiens

<400> 5002  
 Phe Cys Thr Thr Phe Asn Phe Leu Phe Val Phe Cys Leu Arg  
 1 5 10



005003-004004

<210> 5003  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 5003  
Met Pro Ser Gln Thr Ala Arg Pro Gly Leu Gln Leu Phe Thr Thr Pro  
1 5 10 15  
Cys Ile Leu Gln Leu Leu Trp Cys Phe Ala Pro Pro Val Val Gly Asn  
20 25 30  
Phe Cys Thr Thr Leu  
35

<210> 5004  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 5004  
Met Ala Gly Ser His Ala Val Trp Ala Trp His Cys Pro Gly Leu  
1 5 10 15

<210> 5005  
<211> 31  
<212> PRT  
<213> Homo sapiens

<400> 5005  
Met Leu Ser Asn Lys Ile Phe Pro Val Tyr Phe Gln Leu Val Lys Ser  
1 5 10 15  
Phe Ile Phe Val Val Gly Cys Cys Leu Phe Thr Leu Gly Gly Asn  
20 25 30

<210> 5006  
<211> 71  
<212> PRT  
<213> Homo sapiens

<400> 5006  
Met Phe Leu Pro Leu Ser Val Asp Tyr His Tyr Arg Ile Leu Gly Phe  
1 5 10 15  
Phe Leu Ser Phe Cys Ser Ala Leu His Pro Leu Val Val Cys Phe Phe  
20 25 30  
Cys Trp Ala Leu Leu Ile Ser Leu Pro Leu Val Ser Ser Pro Thr Ala  
35 40 45  
Tyr Val Leu Lys Cys Val Phe Leu Lys Tyr Cys Phe Pro Leu Val Thr  
50 55 60



Phe Leu Leu Glu Asp Phe Gln  
65 70

<210> 5007  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 5007  
Met Ser Pro Val Leu Trp Trp Ser Trp Asn Leu Ile Leu Phe Met Asn  
1 5 10 15  
Phe Gln Ser Leu Glu Lys Ser Met Val Trp Ile Trp Glu Val Gly Leu  
20 25 30

Ala Asp

<210> 5008  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 5008  
Met Gly Leu Leu Leu Phe Gly Gly Ile Phe Leu Leu Thr Val Ile Met  
1 5 10 15  
Lys Val Ile Thr Met Arg Asp Ser Asp Leu Phe Leu Lys Phe Gly Gly  
20 25 30

Gly Ile Ser Pro His  
35

<210> 5009  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 5009  
Met Phe Leu Tyr Arg Asn Lys Phe Ile Pro Val Thr Leu Trp  
1 5 10

<210> 5010  
<211> 36  
<212> PRT  
<213> Homo sapiens

<400> 5010  
Met Tyr Trp Val Ile Ala Gly Thr Thr Phe Thr Ser Leu Leu Cys Leu  
1 5 10 15  
Ile Gln Phe Ile Ser Leu Val Cys Ala Leu Leu Lys Tyr Leu Cys Leu  
20 25 30



Asn Phe Cys Ile  
35

<210> 5011  
<211> 35  
<212> PRT  
<213> Homo sapiens

<400> 5011  
Met Ile Leu Ser Leu Val Leu Ser Tyr Asn Leu Phe Leu Val Gln Leu  
1 5 10 15  
Ile Leu Cys Thr Ile Thr Ala Glu Met Ser Asn Trp Asp Arg Leu Ala  
20 25 30  
Ser Lys Ala  
35

<210> 5012  
<211> 23  
<212> PRT  
<213> Homo sapiens

<400> 5012  
His Leu Pro Ile Cys Phe Leu Phe Ser Ala Ser Pro Gly Ala Ser Gly  
1 5 10 15  
His Phe Leu Leu Pro Phe Leu  
20

<210> 5013  
<211> 30  
<212> PRT  
<213> Homo sapiens

<400> 5013  
Met Ser Ile Phe Val Gln Val Phe Val Trp Lys Tyr Val Phe Val Ser  
1 5 10 15  
Leu Arg Tyr Ile Gly Lys Glu Leu Gln Asn Gln Leu Cys Ala  
20 25 30

<210> 5014  
<211> 47  
<212> PRT  
<213> Homo sapiens

<400> 5014  
Met Lys Cys Asn Ser Cys Ser Leu Gly Pro Phe His Ser Leu Phe Leu  
1 5 10 15  
Gly Pro Ala Cys Gly Leu Val Gly Thr Leu Glu Ser Arg His Ser Arg



20

25

30

Gly Arg Gly Arg Ala Ala Phe Leu Ala Gly His Ser Arg Ala Leu  
35 40 45

<210> 5015  
<211> 134  
<212> PRT  
<213> Homo sapiens

<400> 5015  
Met Gly Pro Glu Asp Leu Gly Glu Arg Asp Asn Ser Phe His Cys Ile  
1 5 10 15  
Phe Val Thr Ala Thr Phe Leu Glu Thr Phe Phe Trp Lys Arg Leu Pro  
20 25 30  
Trp Leu Leu Val Gln Met Gly Val Ser Gln Gly Ala Gly Leu Cys Pro  
35 40 45  
Trp Asn Leu Ser Leu Ala Thr Cys Phe Arg Asp Trp Ser Gly Gly Thr  
50 55 60  
Glu Gly Leu Gly Phe Ser Leu Trp Gly Leu Cys Cys Leu Trp Gly Tyr  
65 70 75 80  
Thr Glu Gly Lys Ala Gly Gln Trp Gly Leu Cys Cys Gly Glu Trp Gln  
85 90 95  
Leu Ala Gln Ser Arg Asp Lys Ile Leu Glu Leu Gly Arg Ser Pro Ala  
100 105 110  
Phe Gly Val Ala Phe Gly Ala Pro Gly Thr Ala Gly Arg Gly Ala Gln  
115 120 125  
Tyr Leu Leu Ser Ser Ala  
130

<210> 5016  
<211> 48  
<212> PRT  
<213> Homo sapiens

<400> 5016  
Met Ser Phe Tyr Ile Leu Leu Leu Ala Leu Ile Leu Phe Ile Ala Gly  
1 5 10 15  
Phe Ile Leu Arg Ser Ile Ile Ile Lys Arg Ser Leu Phe Ser Val Asn  
20 25 30  
Phe Met Gln Thr Arg Trp Gln Arg Leu Asn Phe Ser Leu Arg Asp Gln  
35 40 45



<210> 5017  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens

<400> 5017  
 Met Cys Leu Ile Phe Ser Ile Cys Phe Leu Cys Ile His Ile Gly Phe  
   1                  5                  10                  15  
 Cys Phe Val Phe Asn Leu Leu Ile Met Gly Leu Asn Phe Gln Ile Tyr  
           20                  25                  30  
 Phe

<210> 5018  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

<400> 5018  
 Lys Glu Ala Gly Thr Trp Leu Val Phe Trp Ile Arg Leu Asp Phe Ser  
   1                  5                  10                  15  
 Thr Gly Gln Asp Ser Leu Phe Leu Gly Arg Ala Glu Cys His Val Asp  
           20                  25                  30  
 Ser Ser Asp Arg Ile Thr Ala Val Pro Leu Ser Leu Gly Phe Glu Ser  
           35                  40                  45  
 Leu Gly Leu Gly His  
       50

<210> 5019  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens

<400> 5019  
 Met Cys Pro Tyr Cys Pro Thr Ser Cys Ala Leu Leu Val Met Cys Phe  
   1                  5                  10                  15  
 Leu Leu Ile Ser Leu Ser Cys Leu Val Ala Ser Ser Leu Leu Lys  
           20                  25                  30  
 Val

<210> 5020  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens

<400> 5020



Met Cys Leu Asn Leu Thr Val Ile Ser Ala Leu Leu Trp Trp Ser Gly  
 1 5 10 15

Thr Lys Val Ala Val Ala Pro Arg Tyr Ala Tyr Thr Val Lys Asn Asn  
 20 25 30

Leu

<210> 5021  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

<400> 5021  
 Met Lys Gly His Phe Gly Lys Gly Leu Asp Glu Leu Val Ala Phe Asn  
 1 5 10 15

Leu Cys Leu His Leu Pro Leu Ser Ala Thr Leu Gly Arg Pro Gly Gly  
 20 25 30

Ala Ser Glu Asp His Arg Pro Thr Gly Leu Ala Ile Met Thr Pro Leu  
 35 40 45

Glu Val Ser Ser Ser  
 50

<210> 5022  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<400> 5022  
 Glu Val Lys Cys Ile Tyr Ile Phe Leu Trp Leu Leu Met Leu Leu Val  
 1 5 10 15

Leu His Leu Arg Ile His Cys Gln Ile Gln Gly His Glu Asp Leu Leu  
 20 25 30

Leu Cys Phe Leu Leu Arg Ile Leu  
 35 40

<210> 5023  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (10)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (42)



<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5023

Met Phe Phe Pro Cys Leu Pro Thr Leu Xaa Leu Arg Ile Leu His Ser  
1 5 10 15  
Gly Trp Val Gly Leu Phe Leu Leu Ile Ser Ser Arg Ala Pro Ser Ser  
20 25 30  
Ser Leu Ala Trp Lys His Gly Pro Gly Xaa Leu Trp Trp Pro Arg Arg  
35 40 45  
Pro Leu Arg Ser Cys Thr Gly Leu Ala Ser Cys Gly  
50 55 60

<210> 5024

<211> 31

<212> PRT

<213> Homo sapiens

<400> 5024

Met Met Lys Met Lys Met Lys Met Gln Trp Met Leu Met Val Val Met  
1 5 10 15  
Met Met Ile Lys Gly Val Met Met Asn Thr Val Met Met Met Thr  
20 25 30

<210> 5025

<211> 47

<212> PRT

<213> Homo sapiens

<400> 5025

Met Arg Ile Tyr Leu Met Leu Val Leu Val Tyr Cys Glu Leu Asn Ile  
1 5 10 15  
Thr Ala Leu Glu Pro Lys Arg Arg Cys Leu Arg His Gly Leu Leu Leu  
20 25 30  
Leu Cys Ser Phe Gln Gly Ala Pro Val Ile Pro Ala Val Ser Thr  
35 40 45

<210> 5026

<211> 13

<212> PRT

<213> Homo sapiens

<400> 5026

Met Ala Ser Gly Leu Asn Ser Gly Ala Phe Gly Val Val  
1 5 10

<210> 5027

<211> 17







Ile Leu Phe Ser Lys  
20

<210> 5031  
<211> 35  
<212> PRT  
<213> Homo sapiens

<400> 5031  
Met Phe Phe Glu Ile His Pro Leu Leu Thr Phe Cys Thr Ile Cys Phe  
1 5 10 15

Ile Ile Cys Thr Leu Cys Val Gly Gly Leu Cys Val Gln Tyr Ala Ile  
20 25 30

Gly Phe Ser  
35

<210> 5032  
<211> 45  
<212> PRT  
<213> Homo sapiens

<400> 5032  
Met Leu Leu Leu Ser Phe His Ser Leu Leu Tyr Phe Gly Asp Leu Phe  
1 5 10 15

Ile Leu Leu Cys Val His Leu Ile Leu Gln Cys Val Ser Thr Thr Phe  
20 25 30

Asn Leu Phe Thr Tyr Arg Thr Met Gln Glu Phe Leu Trp  
35 40 45

<210> 5033  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 5033  
Met Cys Leu Cys Asn Asp Cys Leu Phe Trp Phe Thr Met Phe Leu  
1 5 10 15

<210> 5034  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 5034  
Met Ile Thr Asp Val Gln Leu Ala Ile Phe Ala Asn Met Leu Gly Val  
1 5 10 15

Ser Leu Phe Leu Leu Val Val Leu Tyr His Tyr Val Ala Val Asn Asn  
20 25 30



Pro Lys Lys Gln Glu  
35

<210> 5035  
<211> 99  
<212> PRT  
<213> Homo sapiens

<400> 5035  
Phe His Pro Phe Thr Phe Tyr Val Phe Val Cys Leu Cys Leu Lys Cys  
1 5 10 15  
Ile Tyr His Arg Gln His Ile Val Gly Ser Cys Phe Phe Ile Gln Phe  
20 25 30  
Asp Ser Leu Cys Leu Leu Ile Asp Val Trp Val His Leu His Leu Met  
35 40 45  
Leu Leu Ser Val Trp Leu Gly Leu Ser Leu Ser Ser Cys Tyr Leu Phe  
50 55 60  
Cys Ile Cys Ser Met Tyr Ala Leu Phe Pro Phe Leu Pro Phe Ser Ala  
65 70 75 80  
Phe Phe Trp Ile Thr Val Phe Phe Asn Asp Ser Ile Val Phe Ser Ser  
85 90 95  
Leu Ile Tyr

<210> 5036  
<211> 234  
<212> PRT  
<213> Homo sapiens

<400> 5036  
Lys Leu Leu Tyr Thr Thr Leu Arg His Pro Lys Cys Phe Leu Gln Arg  
1 5 10 15  
Leu Ser Leu Glu Asn Cys His Leu Thr Glu Ala Asn Cys Lys Asp Leu  
20 25 30  
Ala Ala Val Leu Val Val Ser Arg Glu Leu Thr His Leu Cys Leu Ala  
35 40 45  
Lys Asn Pro Ile Gly Asn Thr Gly Val Lys Phe Leu Cys Glu Gly Leu  
50 55 60  
Arg Tyr Pro Glu Cys Lys Leu Gln Thr Leu Val Leu Trp Asn Cys Asp  
65 70 75 80  
Ile Thr Ser Asp Gly Cys Cys Asp Leu Thr Lys Leu Leu Gln Glu Lys  
85 90 95  
Ser Ser Leu Leu Cys Leu Asp Leu Gly Leu Asn His Ile Gly Val Lys  
100 105 110



Gly Met Lys Phe Leu Cys Glu Ala Leu Arg Lys Pro Leu Cys Asn Leu  
115 120 125

Arg Cys Leu Trp Leu Trp Gly Cys Ser Ile Pro Pro Phe Ser Cys Glu  
130 135 140

Asp Leu Cys Ser Ala Leu Ser Cys Asn Gln Ser Leu Val Thr Leu Asp  
145 150 155 160

Leu Gly Gln Asn Pro Leu Gly Ser Ser Gly Val Lys Met Leu Phe Glu  
165 170 175

Thr Leu Thr Cys Ser Ser Gly Thr Leu Arg Thr Leu Arg Leu Lys Ile  
180 185 190

Asp Asp Phe Asn Asp Glu Leu Asn Lys Leu Leu Glu Glu Ile Glu Glu  
195 200 205

Lys Asn Pro Gln Leu Ile Ile Asp Thr Glu Lys His His Pro Trp Glu  
210 215 220

Glu Arg Pro Ser Ser His Asp Phe Met Ile  
225 230

<210> 5037

<211> 244

<212> PRT

<213> Homo sapiens

<400> 5037

Met Met Arg Thr Gln Cys Leu Leu Gly Leu Arg Thr Phe Val Ala Phe  
1 5 10 15

Ala Ala Lys Leu Trp Ser Phe Phe Ile Tyr Leu Leu Arg Arg Gln Ile  
20 25 30

Arg Thr Val Ile Gln Tyr Gln Thr Val Arg Tyr Asp Ile Leu Pro Leu  
35 40 45

Ser Pro Val Ser Arg Asn Arg Leu Ala Gln Val Lys Arg Lys Ile Leu  
50 55 60

Val Leu Asp Leu Asp Glu Thr Leu Ile His Ser His His Asp Gly Val  
65 70 75 80

Leu Arg Pro Thr Val Arg Pro Gly Thr Pro Pro Asp Phe Ile Leu Lys  
85 90 95

Val Val Ile Asp Lys His Pro Val Arg Phe Phe Val His Lys Arg Pro  
100 105 110

His Val Asp Phe Phe Leu Glu Val Val Ser Gln Trp Tyr Glu Leu Val  
115 120 125

Val Phe Thr Ala Ser Met Glu Ile Tyr Gly Ser Ala Val Ala Asp Lys  
130 135 140

Leu Asp Asn Ser Arg Ser Ile Leu Lys Arg Arg Tyr Tyr Arg Gln His







50

55

<210> 5040  
 <211> 7  
 <212> PRT  
 <213> Homo sapiens

<400> 5040  
 Ile Ile Gly Thr Phe Tyr Gln  
 1 5

<210> 5041  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<400> 5041  
 Met Thr Gly His Ser Pro Ser Pro Ile Tyr Leu Val Leu Ala Trp Gly  
 1 5 10 15  
 Val Thr Ala Ala Ala Thr Thr Leu Thr Gly Pro Val Leu Ser Arg Tyr  
 20 25 30  
 Asn Leu Ala Thr Pro Trp Asn Ser  
 35 40

<210> 5042  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens

<400> 5042  
 Met Pro Asn Cys Leu His Ile Ile Leu Gly Ser Phe Leu Leu Ile Ile  
 1 5 10 15  
 Phe Thr Val Cys Met Phe Ile Gly Lys Gly Leu Leu  
 20 25

<210> 5043  
 <211> 27  
 <212> PRT  
 <213> Homo sapiens

<400> 5043  
 Met Leu Leu Leu Phe Trp Thr Phe Ala Leu Asp Val Val Pro Thr Glu  
 1 5 10 15  
 Trp Leu Ala Gly Arg Arg Glu Ile Leu Phe Arg  
 20 25

<210> 5044



<211> 47  
 <212> PRT  
 <213> Homo sapiens

<400> 5044  
 Met Tyr Ser Lys Ser Ser Ala Asn Ile Ser Gln Gly Met Leu Asp Ile  
   1                  5                  10                  15  
 Leu Leu Trp Ile Asp Leu Ala His Asp Asp Leu Leu Gly Ser Pro Ser  
           20                  25                  30  
 Pro Val Ile Leu Arg Ser His Ala His Ser Gly Ile Leu Thr Val  
       35                  40                  45

<210> 5045  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens  
 <400> 5045  
 Met Phe Ser Arg Phe Ile His Leu Phe Gly Val Leu Asn Leu Met Trp  
   1                  5                  10                  15  
 Leu Ser Leu Val Ser Cys Gln Cys Leu Phe Ala Phe Cys Phe Gln Arg  
           20                  25                  30

<210> 5046  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens  
 <400> 5046  
 Met Gly Lys Pro Pro Thr His Glu Ala Ile His Ser Val Val Lys Trp  
   1                  5                  10                  15  
 Leu Leu Ile Val Thr Lys Leu Leu Arg Leu Ser Gln Ile Cys Phe Leu  
           20                  25                  30  
 Leu Phe Pro Leu Phe Leu Phe Leu Thr Ser Gly Thr Arg Leu Gly Ile  
       35                  40                  45  
 Arg Leu Ile Phe Phe Cys Lys Thr Ala Glu Phe Phe Ile Phe Asn Ile  
       50                  55                  60  
 His Phe Ile Ile Arg Lys Ile Ile Tyr Thr Ile Ser  
       65                  70                  75

<210> 5047  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens



Overall mean		Overall SD	
1	0.00	0.00	0.00
2	0.00	0.00	0.00
3	0.00	0.00	0.00
4	0.00	0.00	0.00
5	0.00	0.00	0.00
6	0.00	0.00	0.00
7	0.00	0.00	0.00
8	0.00	0.00	0.00
9	0.00	0.00	0.00
10	0.00	0.00	0.00
11	0.00	0.00	0.00
12	0.00	0.00	0.00
13	0.00	0.00	0.00
14	0.00	0.00	0.00
15	0.00	0.00	0.00
16	0.00	0.00	0.00
17	0.00	0.00	0.00
18	0.00	0.00	0.00
19	0.00	0.00	0.00
20	0.00	0.00	0.00
21	0.00	0.00	0.00
22	0.00	0.00	0.00
23	0.00	0.00	0.00
24	0.00	0.00	0.00
25	0.00	0.00	0.00
26	0.00	0.00	0.00
27	0.00	0.00	0.00
28	0.00	0.00	0.00
29	0.00	0.00	0.00
30	0.00	0.00	0.00
31	0.00	0.00	0.00
32	0.00	0.00	0.00
33	0.00	0.00	0.00
34	0.00	0.00	0.00
35	0.00	0.00	0.00
36	0.00	0.00	0.00
37	0.00	0.00	0.00
38	0.00	0.00	0.00
39	0.00	0.00	0.00
40	0.00	0.00	0.00
41	0.00	0.00	0.00
42	0.00	0.00	0.00
43	0.00	0.00	0.00
44	0.00	0.00	0.00
45	0.00	0.00	0.00
46	0.00	0.00	0.00
47	0.00	0.00	0.00
48	0.00	0.00	0.00
49	0.00	0.00	0.00
50	0.00	0.00	0.00
51	0.00	0.00	0.00
52	0.00	0.00	0.00
53	0.00	0.00	0.00
54	0.00	0.00	0.00
55	0.00	0.00	0.00
56	0.00	0.00	0.00
57	0.00	0.00	0.00
58	0.00	0.00	0.00
59	0.00	0.00	0.00
60	0.00	0.00	0.00
61	0.00	0.00	0.00
62	0.00	0.00	0.00
63	0.00	0.00	0.00
64	0.00	0.00	0.00
65	0.00	0.00	0.00
66	0.00	0.00	0.00
67	0.00	0.00	0.00
68	0.00	0.00	0.00
69	0.00	0.00	0.00
70	0.00	0.00	0.00
71	0.00	0.00	0.00
72	0.00	0.00	0.00
73	0.00	0.00	0.00
74	0.00	0.00	0.00
75	0.00	0.00	0.00
76	0.00	0.00	0.00
77	0.00	0.00	0.00
78	0.00	0.00	0.00
79	0.00	0.00	0.00
80	0.00	0.00	0.00
81	0.00	0.00	0.00
82	0.00	0.00	0.00
83	0.00	0.00	0.00
84	0.00	0.00	0.00
85	0.00	0.00	0.00
86	0.00	0.00	0.00
87	0.00	0.00	0.00
88	0.00	0.00	0.00
89	0.00	0.00	0.00
90	0.00	0.00	0.00
91			

Leu Met Lys Ser Ala Leu Val Trp Met Ile Trp Leu  
20 25

<213> Homo sapiens

Phe Glu Arg Ile  
20

<213> Homo sapiens

Lys Lys Lys Lys Lys Lys  
50

<213> Homo sapiens

Met Ser Ser Trp Leu Leu Val Tyr Ile Gly Trp Leu Leu Ser Ser Leu  
1 5 10 15

<213> Homo sapiens



Table 1. Demographic characteristics of the study population	
Age (years)	Mean (SD)
Male	55.2 (10.5)
Female	56.8 (11.2)
Marital status	
Married	78.5%
Single	21.5%
Education level	
High school or above	65.2%
Below high school	34.8%
Occupation	
Professional	12.3%
Managerial	18.7%
Technical	25.4%
Service	32.1%
Unemployed	11.5%
Income (USD/month)	
< 1000	15.6%
1000-2000	28.9%
2000-3000	35.2%
> 3000	19.3%
Health insurance	
Yes	82.4%
No	17.6%
Comorbidities	
Hypertension	45.3%
Diabetes	32.1%
Cholesterol	28.7%
Smoking status	
Current smoker	18.9%
Former smoker	22.5%
Non-smoker	58.6%
Alcohol consumption	
Regular	12.1%
Occasional	25.4%
Never	62.5%

&lt;221&gt; SITE

$\langle 222 \rangle$  (192)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5051

Met Lys Ala Pro Leu Ala Thr Leu Ala Leu Leu Trp Tyr His Thr Val  
1 5 10 15

Val Arg Pro Phe Phe Ala Leu Asp Gly Ser Asp Asn Lys Ala Gly Leu  
20 25 30

Asp Glu Ala Lys Glu Ile Leu Leu Lys Lys Glu Ala Ala Tyr Pro Asn  
35 40 45

Ser Ser Leu Phe Met Phe Phe Lys Gly Arg Ile Gln Arg Leu Glu Cys  
50 55 60

Gln Ile Asn Ser Ala Leu Thr Ser Phe His Thr Ala Leu Glu Leu Ala  
65 70 75 80

Val Asp Gln Arg Glu Ile Gln His Val Cys Leu Tyr Glu Ile Gly Trp  
85 90 95

Cys Ser Met Ile Glu Leu Asn Phe Lys Asp Ala Phe Asp Ser Phe Glu  
100 105 110

Arg Leu Lys Asn Glu Ser Arg Trp Ser Gln Cys Tyr Tyr Ala Tyr Leu  
115 120 125

Thr Ala Val Cys Gln Gly Ala Thr Gly Asp Val Asp Gly Ala Gln Ile  
130 135 140

Val	Phe	Lys	Glu	Val	Gln	Lys	Leu	Phe	Lys	Arg	Lys	Asn	Asn	Gln	Ile
145					150					155					160

Glu Gln Phe Ser Val Lys Lys Ala Glu Arg Phe Arg Lys Gln Thr Pro  
165 170 175

Thr Lys Ala Leu Cys Val Leu Ala Ser Ile Glu Val Leu Tyr Leu Xaa  
180 185 190

Lys Ala Leu Pro Asn Cys Ser Phe Pro Asn Leu Gln Arg Met Ser Gln  
195 200 205

Ala Cys His Glu Val Asp Asp Ser Ser Val Val Gly Leu Lys Tyr Leu  
210 215 220

Leu Leu Gly Ala Ile His Lys Cys Leu Gly Asn Ser Glu Asp Ala Val  
225 230 235 240

Gln Tyr Phe Gln Arg Ala Val Lys Asp Glu Leu Cys Arg Gln Asn Asn  
245 250 255

Leu Tyr Val Gln Pro Tyr Ala Cys Tyr Glu Leu Gly Cys Leu Leu Leu  
260 265 270

Asp Lys Pro Glu Thr Val Gly Arg Gly Arg Ala Leu Leu Leu Gln Ala  
275 280 285



Lys Glu Asp Phe Ser Gly Tyr Asp Phe Glu Asn Arg Leu His Val Arg  
 290 295 300

Ile His Ala Ala Leu Ala Ser Leu Arg Glu Leu Val Pro Gln  
 305 310 315

<210> 5052  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

<400> 5052  
 Met Phe Leu Val Leu Val Ile Cys Tyr Tyr Leu Leu Leu Ser Ser Arg  
 1 5 10 15

Gly Pro Asp Trp Pro Trp His Asn  
 20

<210> 5053  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens

<400> 5053  
 Met Leu Arg Asn Thr Ala Leu Trp Tyr His Leu Leu Thr Asp Leu Leu  
 1 5 10 15

Leu Ile Tyr Leu Ile Gly Arg Val Val Ser Ile Ser Phe Tyr Phe Tyr  
 20 25 30

His

<210> 5054  
 <211> 57  
 <212> PRT  
 <213> Homo sapiens

<400> 5054  
 Glu Pro Leu Ala Asp Phe Cys Phe Leu Tyr Arg Leu Leu Cys Arg Leu  
 1 5 10 15

Thr Ser Arg Leu Tyr Pro Cys Leu Cys Glu Arg Gly Cys Val Val Gly  
 20 25 30

Thr Gly Thr Ile Leu Thr Gln Lys Leu Ala Thr Ser His Cys Leu Ala  
 35 40 45

Gln Met Trp Ile Ile Val Ile Thr Asn  
 50 55

<210> 5055  
 <211> 32















<210> 5065  
 <211> 34  
 <212> PRT  
 <213> Homo sapiens

<400> 5065  
 Met Phe Met Phe Leu Leu Leu Val Gly Leu Cys Leu Phe Pro Leu Asn  
           1                  5                  10                  15

Ile Thr Lys Lys Asn Lys Lys Lys Ser Cys Ile Asn Ile Cys Cys Ile  
                   20                  25                  30

Ser Lys

<210> 5066  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 5066  
 Asn Val Cys Phe Ser Cys Leu Leu Lys Leu Phe Trp Gly Ser Gln  
           1                  5                  10                  15

<210> 5067  
 <211> 14  
 <212> PRT  
 <213> Homo sapiens

<400> 5067  
 Ala Ala Leu Trp Gln Ser Leu Leu Phe Cys Phe Val Cys Phe  
           1                  5                  10

<210> 5068  
 <211> 64  
 <212> PRT  
 <213> Homo sapiens

<400> 5068  
 Met Val Leu Leu Gln Thr Val Val Trp Leu Ser Ser His Val Leu Trp  
           1                  5                  10                  15

Leu Pro Gln Asn Arg Ala Gln Ala Ala Arg Gly His Leu His Val Pro  
                   20                  25                  30

Leu Leu Ala Val Pro Ala Thr Ser Lys Leu Cys His Arg Leu Asn Ser  
           35                  40                  45

Ser Phe Arg Gly Pro Gly Trp His Pro Gly Asp Leu Pro Leu Leu Phe  
           50                  55                  60



<210> 5069  
 <211> 42  
 <212> PRT  
 <213> Homo sapiens

<400> 5069  
 Leu Trp Arg Leu Ala Val Leu Lys Leu Ile Cys Gly Phe Ile Asn Thr  
   1                  5                  10                  15  
 Leu Leu Ile Ile Phe Pro Gly Glu Ile Phe Ile Lys Cys Arg Pro Ala  
                   20                  25                  30  
 Lys Ala Ile Leu Lys Arg Arg Arg Arg His  
           35                  40

<210> 5070  
 <211> 45  
 <212> PRT  
 <213> Homo sapiens

<400> 5070  
 Met Leu Phe Val Leu Tyr Met Ser Leu Leu Ser Lys Ala Val Ser Ser  
   1                  5                  10                  15  
 Met Arg Thr Gly Thr Ile Leu Ile Asn Cys Val Phe Leu Ala Pro His  
                   20                  25                  30  
 Thr Ser Ala Trp Asn Ile Ala Thr Ile Asn Lys Cys Leu  
           35                  40                  45

<210> 5071  
 <211> 27  
 <212> PRT  
 <213> Homo sapiens

<400> 5071  
 Ser Tyr Ile Ser Asp Thr Arg Ser His Phe Leu Phe Leu Tyr Phe Ile  
   1                  5                  10                  15  
 His Pro Phe Ile Gln Gln Ile Phe Ala Glu His  
           20                  25

<210> 5072  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 5072  
 Met Leu Leu His Leu Cys Leu Ser Leu Pro Ser Ser Val Trp Phe Leu  
   1                  5                  10                  15



Gly Val Leu Leu Leu Ser Cys Val Asn Thr Ala Leu Gln Tyr His  
 20 25 30

<210> 5073  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 5073  
 Met Ala Arg Ala Cys Val Phe Gln Leu Ser Leu Trp Arg Lys Leu Pro  
 1 5 10 15

Val Gly Ile Asn Leu Ser Pro Ala Ile Leu Ser Leu Ser Leu Gly Cys  
 20 25 30

Leu Gly Leu Gly Phe Leu Leu Leu Leu Glu Arg Met Thr Thr Asp Ser  
 35 40 45

Gly Ile Arg Gln Arg Arg Gln Thr  
 50 55

<210> 5074  
 <211> 70  
 <212> PRT  
 <213> Homo sapiens

<400> 5074  
 Met Gln Ser Leu Pro Ser Ala Ser Thr Phe Ser Ala Ser Ser Ala Cys  
 1 5 10 15

Gly Ala Ala Met Arg Pro Ala Arg Gly Ser Ala Pro Ser Ala Thr Arg  
 20 25 30

Pro Leu Val Pro Thr Thr Ser Ile Val Ser Thr Ser Ala Glu Pro Glu  
 35 40 45

Thr Gln Gly Thr Leu Glu His His Gly Pro Trp Gly Leu Cys Pro Ile  
 50 55 60

Ser Ser Pro Pro Gln Val  
 65 70

<210> 5075  
 <211> 34  
 <212> PRT  
 <213> Homo sapiens

<400> 5075  
 Met Ala Ser Arg Val Leu Ala Ala Leu Ile Val Ala Ser Val Val Gly  
 1 5 10 15

Leu Ala Glu Leu Tyr Val Met Val Arg Ala Met Glu Gly Glu Leu Gly  
 20 25 30



Glu Leu

<210> 5076  
<211> 27  
<212> PRT  
<213> Homo sapiens

<400> 5076  
Met Ala Phe Leu Gly Leu Thr Leu Cys Thr Leu His Leu Gly Ile Gln  
1 5 10 15  
Ala Ser Thr Val Pro Leu Gly Leu Pro Ser Pro  
20 25

<210> 5077  
<211> 43  
<212> PRT  
<213> Homo sapiens

<400> 5077  
Met Val Val Glu Glu Leu Ala Asn Ile Lys Leu Ala Pro Glu Ile Gln  
1 5 10 15  
Thr Cys Val Tyr Cys Ser Gly Ser Met Glu Leu Val Thr Met Gly Lys  
20 25 30  
Arg Gln Arg Leu Glu Leu Cys Lys Val Met Glu  
35 40

<210> 5078  
<211> 81  
<212> PRT  
<213> Homo sapiens

<400> 5078  
Met Val Ala Arg Val Trp Ser Leu Met Arg Phe Leu Ile Lys Gly Ser  
1 5 10 15  
Val Pro Gly Gly Ala Val Tyr Leu Val Tyr Asp Gln Glu Leu Leu Gly  
20 25 30  
Pro Ser Asp Lys Ser Gln Ala Ala Leu Gln Lys Ala Gly Glu Val Val  
35 40 45  
Pro Pro Ala Met Leu Pro Val Gln Pro Val Arg Val Ser Ala Asp Arg  
50 55 60  
Pro Ala Asp Thr Pro Ala Pro Ser Pro Ser Lys Asp Leu Leu Ser His  
65 70 75 80  
Pro



<210> 5079  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 5079  
 Met Tyr Ile Leu Leu Phe Leu Leu Ala Ile Phe Leu Arg Leu Tyr  
           1                  5                  10                  15

<210> 5080  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 5080  
 Met Leu Pro Ser Thr Arg Val Phe Thr Leu Arg Tyr Cys Trp Ser Cys  
           1                  5                  10                  15  
 Gln Leu Ser Arg Asp Met Ile Ser Leu Phe Arg Gln Pro Cys Ser Phe  
                   20                  25                  30

<210> 5081  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 5081  
 Met Ala Lys Ser Ser Gly His Asn Ser Leu Val Ala Phe Val Val Val  
           1                  5                  10                  15  
 Val Val Val Leu Phe Phe Val Cys Phe Glu Thr Met Ser Pro Lys Gln  
                   20                  25                  30

<210> 5082  
 <211> 4  
 <212> PRT  
 <213> Homo sapiens

<400> 5082  
 Met Val Lys Pro  
           1

<210> 5083  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens



<400> 5083

Met Pro Leu Val Pro Leu Leu Leu Ser Cys Pro Pro Thr Trp Leu Ala  
1 5 10 15

Arg Phe Gly Val Ser Leu Pro Cys Ser Gly Ile Pro Val Leu Ala  
20 25 30

<210> 5084

<211> 83

<212> PRT

<213> Homo sapiens

<400> 5084

Met Tyr Glu Gln Ala Ala Ala Gly His Gly Pro Ile Ser Pro Phe Ser  
1 5 10 15

Leu Cys Val Ser Leu Gly Ile His Pro Ala Asn Gln Gly Arg Pro Gly  
20 25 30

Val Trp Ala Leu Gly Thr Asn Gly Ala His Ile Leu Glu Trp Gln Ile  
35 40 45

Leu Gly Asp Ala Leu Pro Val Pro Ala Gly Pro Val Pro Pro Thr Gln  
50 55 60

Ser Ser Pro Gln Thr Trp Cys Asn Phe Thr Arg Ala Ile Pro Phe Pro  
65 70 75 80

Arg Leu Pro

<210> 5085

<211> 12

<212> PRT

<213> Homo sapiens

<400> 5085

Trp Trp Gly Arg Val Trp Pro Val Asn Pro Asp His  
1 5 10

<210> 5086

<211> 9

<212> PRT

<213> Homo sapiens

<400> 5086

Met Leu Leu Leu Val Phe Leu Asp Cys  
1 5

<210> 5087

<211> 73

<212> PRT



<213> Homo sapiens

<400> 5087

Met Asn Ile Thr Arg Lys Leu Trp Ser Arg Thr Phe Asn Cys Ser Val  
1 5 10 15  
Pro Cys Ser Asp Thr Val Pro Val Ile Ala Val Ser Val Phe Ile Leu  
20 25 30  
Phe Leu Pro Val Val Phe Tyr Leu Ser Ser Phe Leu His Ser Glu Gln  
35 40 45  
Lys Lys Arg Lys Leu Ile Leu Pro Lys Arg Leu Lys Ser Ser Thr Ser  
50 55 60  
Phe Ala Asn Ile Gln Glu Asn Ser Asn  
65 70

<210> 5088

<211> 9

<212> PRT

<213> Homo sapiens

<400> 5088

Met Lys Ser Pro Glu Tyr His Tyr Gly  
1 5

<210> 5089

<211> 129

<212> PRT

<213> Homo sapiens

<400> 5089

Met Val Asp Leu Ile Gly Glu Val Leu Leu Pro Leu Leu Gly Gln Glu  
1 5 10 15  
Ala Glu Ala Cys Thr Ala Asp Asp Pro Ala Asp His Val Lys Val Pro  
20 25 30  
Ala His Ala Ala Val His Val Val Gln Asn His Ala Leu Leu Gly His  
35 40 45  
Val Val Phe Asp Asp Asp Ala Val Gly Ala Glu Ala Ala Leu Ala  
50 55 60  
Ala Pro Gln Glu Leu Gly Gln Val Leu Ile Gly Glu Val Ala Trp Gly  
65 70 75 80  
Gly Gln Arg Gln Gly Tyr Gln Gly Thr Met Gln Ala Asp Val Gly Thr  
85 90 95  
Gly Trp Asp Val Leu Leu Ser Pro Ala Glu Pro Leu Ile Cys Ala Gln  
100 105 110  
His Phe Val Cys Thr His Gly Leu Ile Gly Ser Gln Ser Arg Glu Ile  
115 120 125



Tyr

<210> 5090  
<211> 61  
<212> PRT  
<213> Homo sapiens

<400> 5090  
Met Cys Leu Leu Leu Trp Leu Thr Thr Phe Gln Arg Thr Ser Gly  
1 5 10 15  
Ala Leu Arg Arg Gly Gly Leu Ser Ser Pro Ala Trp Ala Met Arg Ser  
20 25 30  
Pro Ser Val Tyr Ser Thr Gln Thr Pro Ser Pro Met Met Ser Thr Gly  
35 40 45  
Thr Leu Arg Gly Leu Ser Gly Ala Met Cys Asn Leu Ser  
50 55 60

<210> 5091  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 5091  
Leu Ala Ser Thr Ala Asn Phe Trp Val Val Ile Thr  
1 5 10

<210> 5092  
<211> 46  
<212> PRT  
<213> Homo sapiens

<400> 5092  
Met Ala Ala Gly Thr Phe Leu Tyr Ile Thr Phe Leu Glu Ile Leu Pro  
1 5 10 15  
Gln Glu Leu Ala Ser Ser Glu Gln Arg Ile Leu Lys Val Ile Leu Leu  
20 25 30  
Leu Ala Gly Phe Ala Leu Ser Trp Pro Val Phe Ile Gln Ile  
35 40 45

<210> 5093  
<211> 52  
<212> PRT  
<213> Homo sapiens

<400> 5093  
Met Val Thr Leu Ser Ser Leu Ile Leu Glu Met Trp Tyr Cys Phe Trp  
1 5 10 15



Leu Asn Ile Leu Val Gly Arg Val Ser Ser Arg Gly Phe His Leu Ala  
 20 25 30

Leu Thr Ile Lys Met Thr Leu Ile Ser Trp Val Arg Lys Pro Ile Trp  
 35 40 45

Glu Leu Cys Gln  
 50

<210> 5094  
 <211> 46  
 <212> PRT  
 <213> Homo sapiens

<400> 5094  
 Met Lys Ser Gln Cys Tyr Ser Pro Ser Tyr Phe Ala Phe Phe Cys Leu  
 1 5 10 15

Val Phe Phe Gln Ile Thr Ser Ala Ser Ser Gln Thr Leu Arg Gly His  
 20 25 30

Val Leu Cys Arg Thr Thr Leu Arg Asp Ser Ser Ala Tyr Cys  
 35 40 45

<210> 5095  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 5095  
 Met Phe Thr Cys Thr Ala Gly Leu Ser Cys Leu Phe Gln Phe Cys Phe  
 1 5 10 15

Thr Cys Gly Val Phe Thr Asp Phe Lys Lys Glu Cys Met His Gly Val  
 20 25 30

Glu Gln Asp Thr Val Ser  
 35

<210> 5096  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

<400> 5096  
 Met Pro Ser Glu Ile Ile Tyr Leu Leu Ser Leu Leu Tyr Thr Ser Val  
 1 5 10 15

Cys Leu Gln Gln Pro Pro Gln Pro Arg Trp Val Cys Phe Cys Phe Leu  
 20 25 30

Gly Trp Gly Ala Gly Thr Gly Gly Gly Arg Arg Ala Gly Phe Arg Ser  
 35 40 45



Leu Leu Ala Glu Pro Phe Val  
 50 55

<210> 5097  
 <211> 80  
 <212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (80)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5097  
 Met Leu Val Leu Gly Leu Thr Lys Phe Ala Val Gly Ile Val Leu Ile  
 1 5 10 15  
 Leu Leu Val Arg Gln Leu Val Gln Asn Leu Ser Leu Gln Val Leu Tyr  
 20 25 30  
 Ser Trp Phe Lys Val Val Thr Arg Asn Lys Glu Ala Arg Arg Arg Leu  
 35 40 45  
 Glu Ile Glu Val Pro Tyr Lys Phe Val Thr Tyr Thr Ser Val Gly Ile  
 50 55 60  
 Cys Ala Thr Thr Phe Val Pro Met Leu His Arg Phe Leu Gly Leu Xaa  
 65 70 75 80

<210> 5098  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 5098  
 Met Trp Gln Ser Cys Leu Cys Arg Phe Val Leu Leu Ile Glu Gly Leu  
 1 5 10 15  
 Glu Pro Gly Ala Leu Pro Ala Phe Pro Gly Ser Pro Ser Ser Arg His  
 20 25 30  
 Gly Leu Thr Val Ser His Val Glu Gly Leu Gly Ser Leu Met Lys Cys  
 35 40 45  
 Gly Leu  
 50

<210> 5099  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens



<400> 5099

Met Trp Cys Pro Ala Phe Gly Arg Val Phe Cys Ser Arg  
1 5 10

<210> 5100

<211> 35

<212> PRT

<213> Homo sapiens

<400> 5100

Met Pro Leu Leu Gln Trp Leu Ala Leu Leu Trp Pro Leu Leu Thr Thr  
1 5 10 15

Glu Ala Pro Ser Gly Gly Cys Ser Gln Pro Gly Pro Gly Pro Arg Ser  
20 25 30

Ser Leu Thr  
35

<210> 5101

<211> 91

<212> PRT

<213> Homo sapiens

<400> 5101

Phe Leu Ile Ile Ile Ile Ser Ala Thr Val Met Phe Leu His Val Ser  
1 5 10 15

Glu Arg His Cys Pro Cys Leu Arg Leu Glu Val Leu Ser Ala Lys Val  
20 25 30

Phe Phe Ser Cys Ile Val Arg Ser Ile His Pro Leu Cys Ala Leu Ser  
35 40 45

Ala Phe Glu Arg Leu Gly Cys Ser Gln Ala Ala Val Leu Arg Asp Leu  
50 55 60

Lys Arg Asp Leu Val Ser Leu Gly Ala Glu Ser Ile Tyr Leu Gly Thr  
65 70 75 80

Leu Phe Gln Glu Arg Pro Cys Leu His Phe His  
85 90

<210> 5102

<211> 14

<212> PRT

<213> Homo sapiens

<400> 5102

Met Leu His Ser Arg Leu Tyr Ser Leu Val Gly Trp Leu Leu  
1 5 10

<210> 5103



<211> 26  
 <212> PRT  
 <213> Homo sapiens

<400> 5103  
 Met Arg Thr Tyr Leu Trp Ile Leu Thr Cys Ile Arg Thr Ser Val Gln  
           1                  5                  10                  15  
 Gly Pro Leu Met Thr Met Ala Cys Pro Gly  
                   20                  25

<210> 5104  
 <211> 47  
 <212> PRT  
 <213> Homo sapiens

<400> 5104  
 Met Arg Asn Thr Ala Tyr Leu Pro Ile Ser Leu Leu Leu Val Gly Ser  
           1                  5                  10                  15  
 Gly Leu Cys Leu Ala Gln Arg Ile Thr Leu Phe Thr Ser Gly Thr Phe  
                   20                  25                  30  
 Arg Arg Lys Arg Leu Tyr Arg Asn Tyr Lys Ala Thr Gln Met Ser  
           35                  40                  45

<210> 5105  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (7)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (30)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5105  
 Met Ala Ser Gln Thr Ser Xaa Ile Ile Trp Pro Leu Ala Thr Leu Pro  
           1                  5                  10                  15  
 His Pro Ile Ser Ser Phe Ala Leu Tyr Ser Ser Tyr Thr Xaa Arg Gly  
                   20                  25                  30  
 Val Pro Lys Thr Ser Arg Trp Val Arg Pro Gln Asp Leu His Met Cys  
           35                  40                  45  
 Cys Ser Leu Tyr Leu His Arg Ser Phe Leu Phe Ser Cys Leu Leu Asn  
           50                  55                  60  
 Ser Tyr Leu Pro Ser Gly Leu Ile Ser Thr Phe Ser Pro Leu Leu Val  
           65                  70                  75                  80



Cys Cys Ser Tyr Leu Arg Ser Asn Ser Arg Glu Met  
85 90

<210> 5106  
<211> 35  
<212> PRT  
<213> Homo sapiens

<400> 5106  
Met Cys Leu Leu Trp Ser Trp Leu Trp Val Gln Pro Thr Leu Arg Cys  
1 5 10 15

Val Phe Ile Phe His Tyr Lys Asn Tyr Lys Gln Leu Phe Ile Ser Arg  
20 25 30

Gln Glu Phe  
35

<210> 5107  
<211> 39  
<212> PRT  
<213> Homo sapiens

<400> 5107  
Met Lys Lys Leu Met Pro Arg Glu Phe Arg Gly Phe Ala Phe Arg Cys  
1 5 10 15

Leu Thr Cys Arg Tyr Leu Ile Leu Leu Lys Ile Ser Leu Asp Ile Val  
20 25 30

Ser Val Arg Cys Thr Asp Leu  
35

<210> 5108  
<211> 39  
<212> PRT  
<213> Homo sapiens

<400> 5108  
Met Val Lys Asn Ala Leu Trp Asn Thr Leu His Ser Phe Leu Ser Arg  
1 5 10 15

Leu Arg Phe Thr Ile Thr Ile Trp Lys Phe Leu Gly Cys Phe Gln Cys  
20 25 30

Leu Gly Gly Ala Gln Lys Cys  
35

<210> 5109  
<211> 38  
<212> PRT  
<213> Homo sapiens



[illegible]

Ser Trp Glu His Lys Ala Lys Arg Pro Ser Ile Leu His Tyr Leu Leu  
20 25 30

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<210> 5110
<211> 32
<212> PRT
<213> Homo sapiens
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Phe Glu Gln Leu Pro Met Ala Met Gly Leu Gly Leu Tyr Ser Arg Ala  
20 25 30

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<210> 5111
<211> 73
<212> PRT
<213> Homo sapiens
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Ile Tyr Ile Pro Pro Leu Gln Arg Val Phe Gln Thr Glu Asn Leu Gly  
20 25 30

Ala Leu Asp Leu Leu Phe Leu Thr Gly Leu Ala Ser Ser Val Phe Ile  
35 40 45

Leu Ser Glu Leu Leu Lys Leu Cys Glu Lys Tyr Cys Cys Ser Pro Lys  
50 55 60

Arg Val Gln Met His Pro Glu Asp Val  
65 70

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<210> 5112
<211> 13
<212> PRT
<213> Homo sapiens
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<400> 5112
Met Cys Ser Cys Ser Trp Ala Ser Ser Cys Thr Val Trp
  1                               5               10
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<210> 5113  
 <211> 328  
 <212> PRT  
 <213> Homo sapiens

<400> 5113  
 Met Ser Ser Leu Lys Val Ala Ala Thr Met Ile Ile Leu Lys Phe Ser  
 1 5 10 15  
 Met Ala Pro Thr Ala Val Pro Leu Ser Leu Leu Glu Phe Val Met Gly  
 20 25 30  
 Pro Glu Ala Pro Ser Leu Leu Pro Pro Thr Ser Cys Pro Phe Ala Ser  
 35 40 45  
 Ser Val Thr Thr Ala Ser Gln Gly Arg Gly Phe Arg Ala Glu Tyr Tyr  
 50 55 60  
 Ser Ser Pro Ser Asn Asp Ser Thr Asn Leu Leu Cys Leu Pro Asn His  
 65 70 75 80  
 Met Gln Ala Ser Val Ser Arg Ser Tyr Leu Gln Ser Leu Gly Phe Ser  
 85 90 95  
 Ala Ser Asp Leu Val Ile Ser Thr Trp Asn Gly Tyr Tyr Glu Cys Arg  
 100 105 110  
 Pro Gln Ile Thr Pro Asn Leu Val Ile Phe Thr Ile Pro Tyr Ser Gly  
 115 120 125  
 Cys Gly Thr Phe Lys Gln Ala Asp Asn Asp Thr Ile Asp Tyr Ser Asn  
 130 135 140  
 Phe Leu Thr Ala Ala Val Ser Gly Gly Ile Ile Lys Arg Arg Thr Asp  
 145 150 155 160  
 Leu Arg Ile His Val Ser Cys Arg Met Leu Gln Asn Thr Trp Val Asp  
 165 170 175  
 Thr Met Tyr Ile Ala Asn Asp Thr Ile His Val Ala Asn Asn Thr Ile  
 180 185 190  
 Gln Val Glu Glu Val Gln Tyr Gly Asn Phe Asp Val Asn Ile Ser Phe  
 195 200 205  
 Tyr Thr Ser Ser Ser Phe Leu Tyr Pro Val Thr Ser Arg Pro Tyr Tyr  
 210 215 220  
 Val Asp Leu Asn Gln Asp Leu Tyr Val Gln Ala Glu Ile Leu His Ser  
 225 230 235 240  
 Asp Ala Val Leu Thr Leu Phe Val Asp Thr Cys Val Ala Ser Pro Tyr  
 245 250 255  
 Ser Asn Asp Phe Thr Ser Leu Thr Tyr Asp Leu Ile Arg Ser Gly Cys  
 260 265 270  
 Val Arg Asp Asp Thr Tyr Gly Pro Tyr Ser Ser Pro Ser Leu Arg Ile  
 275 280 285



Ala Arg Phe Arg Phe Arg Ala Phe His Phe Leu Asn Arg Phe Pro Ser  
290 295 300

Val Tyr Leu Arg Cys Lys Met Val Val Cys Arg Ala Tyr Asp Pro Leu  
305 310 315 320

Pro Ala Ala Thr Glu Ala Val Cys  
325

<210> 5114  
<211> 31  
<212> PRT  
<213> Homo sapiens

<400> 5114  
Met Gln Gly Gln Gln Thr Phe Pro Val Lys Gly Gln Ile Gly Ser Ile  
1 5 10 15

Phe Gly Phe Leu Gly Cys Leu Leu Leu Leu Leu Leu Trp Glu  
20 25 30

<210> 5115  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 5115  
Met Pro Phe Tyr Cys Leu Ser Leu Leu Leu Leu Phe Phe Lys Leu Ser  
1 5 10 15

<210> 5116  
<211> 109  
<212> PRT  
<213> Homo sapiens

<400> 5116  
Met Gly Ser Thr Gln Val Ser Phe Phe Phe Leu Phe Ser Phe Leu Leu  
1 5 10 15

Pro Ser Phe Leu His Ser Ser Leu Pro Pro Asn Leu Pro Pro Ser Leu  
20 25 30

Pro Ser Leu Leu Pro Ser Phe Leu Asn Leu Gly Pro Pro Lys Ser Cys  
35 40 45

Trp Asp Tyr Lys Ala Met Ser His Arg Gly Pro Ala Tyr Ile Pro Leu  
50 55 60

Phe Leu Ile Ile Ser Phe Phe Ile Phe Ser Ile Leu Leu Thr Phe Ile  
65 70 75 80



Leu Thr Phe Leu Ser Ala Met Lys Thr Ala Pro Asn Leu Pro His Leu  
85 90 95

Arg Leu Ala Ile Phe Asp Ser Leu Met Gly Glu Val Gln  
100 105

<210> 5117  
<211> 31  
<212> PRT  
<213> Homo sapiens

<400> 5117  
Met Tyr Val Phe Lys Thr Gln Leu Val Thr Cys Asp Cys Glu Ile Asp  
1 5 10 15

Asn Thr Trp Met His Ser Cys Ser His Arg Ile Gly Asp Met Leu  
20 25 30

<210> 5118  
<211> 25  
<212> PRT  
<213> Homo sapiens

<400> 5118  
Asp Ser Ile Pro Ala Ala Gly Glu Leu Gly Ile Val Phe Val Ala Phe  
1 5 10 15

Phe Ile Leu Asp Glu Val Gln Lys Phe  
20 25

<210> 5119  
<211> 30  
<212> PRT  
<213> Homo sapiens

<400> 5119  
Met Leu Thr Leu Phe Phe Lys Leu Leu Leu Ile Ser Ala Tyr Tyr Glu  
1 5 10 15

Glu His Glu Cys Thr Val His Thr Asn Asn Leu Met Ser His  
20 25 30

<210> 5120  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 5120  
Met Thr Lys Pro Lys Pro Leu Leu Leu Ser Tyr Ile Phe Cys Phe His  
1 5 10 15

Val Leu Ser Phe  
20







20						25						30			
Ala	Trp	Gly	Ser	Ala	Thr	Arg	Glu	Glu	Gly	Phe	Asp	Arg	Ser	Thr	Ser
35						40						45			
Leu	Glu	Ser	Ser	Asp	Cys	Glu	Ser	Leu	Asp	Ser	Ser	Asn	Ser	Gly	Phe
50						55						60			
Gly	Pro	Glu	Glu	Asp	Thr	Ala	Tyr	Leu	Asp	Gly	Val	Ser	Leu	Pro	Asp
65						70						75			
Phe	Glu	Leu	Leu	Ser	Asp	Pro	Glu	Asp	Glu	His	Leu	Cys	Ala	Asn	Leu
			85						90			95			
Met	Gln	Leu	Leu	Gln	Glu	Ser	Leu	Ala	Gln	Ala	Arg	Leu	Gly	Ser	Arg
			100						105			110			
Arg	Pro	Ala	Arg	Leu	Leu	Met	Pro	Ser	Gln	Leu	Val	Ser	Gln	Val	Gly
			115						120			125			
Lys	Glu	Leu	Leu	Arg	Leu	Ala	Tyr	Ser	Glu	Pro	Cys	Gly	Leu	Arg	Gly
130						135						140			
Ala	Leu	Leu	Asp	Val	Cys	Val	Glu	Gln	Gly	Lys	Ser	Cys	His	Ser	Val
145						150						155			
Gly	Gln	Leu	Ala	Leu	Asp	Pro	Ser	Leu	Val	Pro	Thr	Phe	Gln	Leu	Thr
			165						170			175			
Leu	Val	Leu	Arg	Leu	Asp	Ser	Arg	Leu	Trp	Pro	Lys	Ile	Gln	Gly	Leu
			180						185			190			
Phe	Ser	Ser	Ala	Asn	Ser	Pro	Phe	Leu	Pro	Gly	Phe	Ser	Gln	Ser	Leu
			195						200			205			
Thr	Leu	Ser	Thr	Gly	Phe	Arg	Val	Ile	Lys	Lys	Lys	Leu	Tyr	Ser	Ser
210						215						220			
Glu	Gln	Leu	Leu	Ile	Glu	Glu	Cys								
225			230												

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<210> 5125
<211> 232
<212> PRT
<213> Homo sapiens
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<400> 5125															
Met	Pro	Ser	Leu	Trp	Asp	Arg	Phe	Ser	Ser	Ser	Ser	Thr	Ser	Ser	Ser
1				5				10						15	
Pro	Ser	Ser	Leu	Pro	Arg	Thr	Pro	Thr	Pro	Asp	Arg	Pro	Pro	Arg	Ser
			20					25					30		
Ala	Trp	Gly	Ser	Ala	Thr	Arg	Glu	Glu	Gly	Phe	Asp	Arg	Ser	Thr	Ser
		35					40					45			
Leu	Glu	Ser	Ser	Asp	Cys	Glu	Ser	Leu	Asp	Ser	Ser	Asn	Ser	Gly	Phe
	50					55					60				







Gly Ile Leu Gly Glu Lys Lys Met Val Phe Ser Phe  
 20 25

<210> 5128  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 5128  
 Lys Ala Ala Val Met Trp Gly His Trp Ala Leu Leu Phe Phe Ser Thr  
 1 5 10 15

Met Cys Met His Phe Gly Ala  
 20

<210> 5129  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 5129  
 Met Val Leu Ser Pro Leu Phe Ser Ala  
 1 5

<210> 5130  
 <211> 224  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (137)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5130  
 Met Glu Ser Gly Ala Tyr Gly Ala Ala Lys Ala Gly Gly Ser Phe Asp  
 1 5 10 15

Leu Arg Arg Phe Leu Thr Gln Pro Gln Val Val Ala Arg Ala Val Cys  
 20 25 30

Leu Val Phe Ala Leu Ile Val Phe Ser Cys Ile Tyr Gly Glu Gly Tyr  
 35 40 45

Ser Asn Ala His Glu Ser Lys Gln Met Tyr Cys Val Phe Asn Arg Asn  
 50 55 60

Glu Asp Ala Cys Arg Tyr Gly Ser Ala Ile Gly Val Leu Ala Phe Leu  
 65 70 75 80

Ala Ser Ala Phe Phe Leu Val Val Asp Ala Tyr Phe Pro Gln Ile Ser  
 85 90 95

Asn Ala Thr Asp Arg Lys Tyr Leu Val Ile Gly Asp Leu Leu Phe Ser  
 100 105 110



Ala	Leu	Trp	Thr	Phe	Leu	Trp	Phe	Val	Gly	Phe	Cys	Phe	Leu	Thr	Asn
	115						120					125			
Gln	Trp	Ala	Val	Thr	Asn	Pro	Lys	Xaa	Val	Leu	Val	Gly	Ala	Asp	Ser
	130					135					140				
Val	Arg	Ala	Ala	Ile	Thr	Phe	Ser	Phe	Phe	Ser	Ile	Phe	Ser	Trp	Gly
	145				150					155					160
Val	Leu	Ala	Ser	Leu	Ala	Tyr	Gln	Arg	Tyr	Lys	Ala	Gly	Val	Asp	Asp
			165						170					175	
Phe	Ile	Gln	Asn	Tyr	Val	Asp	Pro	Thr	Pro	Asp	Pro	Asn	Thr	Ala	Tyr
			180					185					190		
Ala	Ser	Tyr	Pro	Gly	Ala	Ser	Val	Asp	Asn	Tyr	Gln	Gln	Pro	Pro	Phe
		195					200					205			
Thr	Gln	Asn	Ala	Glu	Thr	Thr	Glu	Gly	Tyr	Gln	Pro	Pro	Pro	Val	Tyr
	210					215					220				

<210> 5131  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens

<400> 5131  
 Met Glu Gly Thr Gly Ser Gly Asn Gly Arg Tyr Cys Met  
 1 5 10

<210> 5132  
 <211> 10  
 <212> PRT  
 <213> Homo sapiens

<400> 5132  
 Met Phe Val Gly Cys Ile Asn Val Phe Phe  
 1 5 10

<210> 5133  
 <211> 486  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (200)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5133  
 Arg Pro Pro Arg Val Arg Ala Thr Lys Met Ala Ala Pro Ile Leu Arg



1					5					10					15				
Ser	Phe	Ser	Trp	Gly	Arg	Trp	Ser	Gly	Thr	Leu	Asn	Leu	Ser	Val	Leu				
			20							25				30					
Leu	Pro	Leu	Gly	Leu	Arg	Lys	Ala	His	Ser	Gly	Ala	Gln	Gly	Leu	Leu				
		35							40				45						
Ala	Ala	Gln	Lys	Ala	Arg	Gly	Leu	Phe	Lys	Asp	Phe	Phe	Pro	Glu	Thr				
		50				55							60						
Gly	Thr	Lys	Ile	Glu	Leu	Pro	Glu	Leu	Phe	Asp	Arg	Gly	Thr	Ala	Ser				
		65				70							75						
Phe	Pro	Gln	Thr	Ile	Tyr	Cys	Gly	Phe	Asp	Pro	Thr	Ala	Asp	Ser	Leu				
						85				90				95					
His	Val	Gly	His	Leu	Leu	Ala	Leu	Leu	Gly	Leu	Phe	His	Leu	Gln	Arg				
					100				105				110						
Ala	Gly	His	Asn	Val	Ile	Ala	Leu	Val	Gly	Gly	Ala	Thr	Ala	Arg	Leu				
					115				120				125						
Gly	Asp	Pro	Ser	Gly	Arg	Thr	Lys	Glu	Arg	Glu	Ala	Leu	Glu	Thr	Glu				
								135				140							
Arg	Val	Arg	Ala	Asn	Ala	Arg	Ala	Leu	Arg	Leu	Gly	Leu	Glu	Ala	Leu				
								150				155							
Ala	Ala	Asn	His	Gln	Gln	Leu	Phe	Thr	Asp	Gly	Arg	Ser	Trp	Gly	Ser				
											170				175				
Phe	Thr	Val	Leu	Asp	Asn	Ser	Ala	Trp	Tyr	Gln	Lys	Gln	His	Leu	Val				
									185				190						
Asp	Phe	Leu	Ala	Ala	Val	Gly	Xaa	His	Phe	Arg	Met	Gly	Thr	Leu	Leu				
								200				205							
Ser	Arg	Gln	Ser	Val	Gln	Leu	Arg	Leu	Lys	Ser	Pro	Glu	Gly	Met	Ser				
								215				220							
Leu	Ala	Glu	Phe	Phe	Tyr	Gln	Val	Leu	Gln	Ala	Tyr	Asp	Phe	Tyr	Tyr				
								230				235				240			
Leu	Phe	Gln	Arg	Tyr	Gly	Cys	Arg	Val	Gln	Leu	Gly	Gly	Ser	Asp	Gln				
						245				250				255					
Leu	Gly	Asn	Ile	Met	Ser	Gly	Tyr	Glu	Phe	Ile	Asn	Lys	Leu	Thr	Gly				
								265				270							
Glu	Asp	Val	Phe	Gly	Ile	Thr	Val	Pro	Leu	Ile	Thr	Ser	Thr	Thr	Gly				
								280				285							
Ala	Lys	Leu	Gly	Lys	Ser	Ala	Gly	Asn	Ala	Val	Trp	Leu	Asn	Arg	Asp				
								295				300							
Lys	Thr	Ser	Pro	Phe	Glu	Leu	Tyr	Gln	Phe	Phe	Val	Arg	Gln	Pro	Asp				
								310				315				320			
Asp	Ser	Val	Glu	Arg	Tyr	Leu	Lys	Leu	Phe	Thr	Phe	Leu	Pro	Leu	Pro				
						325				330				335					



Glu Ile Asp His Ile Met Gln Leu His Val Lys Glu Pro Glu Arg Arg  
340 345 350

Gly Pro Gln Lys Arg Leu Ala Ala Glu Val Thr Lys Leu Val His Gly  
355 360 365

Arg Glu Gly Leu Asp Ser Ala Lys Arg Cys Thr Gln Ala Leu Tyr His  
370 375 380

Ser Ser Ile Asp Ala Leu Glu Val Met Ser Asp Gln Glu Leu Lys Glu  
385 390 395 400

Leu Phe Lys Glu Ala Pro Phe Ser Glu Phe Phe Leu Asp Pro Gly Thr  
405 410 415

Ser Val Leu Asp Thr Cys Arg Lys Ala Asn Ala Ile Pro Asp Gly Pro  
420 425 430

Arg Gly Tyr Arg Met Ile Thr Glu Gly Gly Val Ser Ile Asn His Gln  
435 440 445

Gln Val Thr Asn Pro Glu Ser Val Leu Ile Val Gly Gln His Ile Leu  
450 455 460

Lys Asn Gly Leu Ser Leu Leu Lys Ile Gly Lys Arg Asn Phe Tyr Ile  
465 470 475 480

Ile Lys Trp Leu Gln Leu  
485

<210> 5134  
<211> 388  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (102)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (114)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (121)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5134  
Gly His Leu Leu Ala Leu Leu Gly Leu Phe His Leu Gln Arg Ala Gly  
1 5 10 15

His Asn Val Ile Ala Leu Val Gly Gly Ala Thr Ala Arg Leu Gly Asp  
20 25 30

Pro Ser Gly Arg Thr Lys Glu Arg Glu Ala Leu Glu Thr Glu Arg Val



35					40					45						
Arg	Ala	Asn	Ala	Arg	Ala	Leu	Arg	Leu	Gly	Leu	Glu	Ala	Leu	Ala	Ala	
50					55					60						
Asn	His	Gln	Gln	Leu	Phe	Thr	Asp	Gly	Arg	Ser	Trp	Gly	Ser	Phe	Thr	
65					70					75					80	
Val	Leu	Asp	Asn	Ser	Ala	Trp	Tyr	Gln	Lys	Gln	His	Leu	Val	Asp	Phe	
					85					90					95	
Leu	Ala	Ala	Val	Gly	Xaa	His	Phe	Arg	Met	Gly	Thr	Leu	Leu	Ser	Arg	
100					105					110						
Gln	Xaa	Val	Gln	Leu	Arg	Leu	Lys	Xaa	Pro	Glu	Gly	Met	Ser	Leu	Ala	
115					120					125						
Glu	Phe	Phe	Tyr	Gln	Val	Leu	Gln	Ala	Tyr	Asp	Phe	Tyr	Tyr	Leu	Phe	
130					135					140						
Gln	Arg	Tyr	Gly	Cys	Arg	Val	Gln	Leu	Gly	Gly	Ser	Asp	Gln	Leu	Gly	
145					150					155					160	
Asn	Ile	Met	Ser	Gly	Tyr	Glu	Phe	Ile	Asn	Lys	Leu	Thr	Gly	Glu	Asp	
					165					170					175	
Val	Phe	Gly	Ile	Thr	Val	Pro	Leu	Ile	Thr	Ser	Thr	Thr	Gly	Ala	Lys	
180					185					190						
Leu	Gly	Lys	Ser	Ala	Gly	Asn	Ala	Val	Trp	Leu	Asn	Arg	Asp	Lys	Thr	
195					200					205						
Ser	Pro	Phe	Glu	Leu	Tyr	Gln	Phe	Phe	Val	Arg	Gln	Pro	Asp	Asp	Ser	
210					215					220						
Val	Glu	Arg	Tyr	Leu	Lys	Leu	Phe	Thr	Phe	Leu	Pro	Leu	Pro	Glu	Ile	
225					230					235					240	
Asp	His	Ile	Met	Gln	Leu	His	Val	Lys	Glu	Pro	Glu	Arg	Arg	Gly	Pro	
245					250					255						
Gln	Lys	Arg	Leu	Ala	Ala	Glu	Val	Thr	Lys	Leu	Val	His	Gly	Arg	Glu	
260					265					270						
Gly	Leu	Asp	Ser	Ala	Lys	Arg	Cys	Thr	Gln	Ala	Leu	Tyr	His	Ser	Ser	
275					280					285						
Ile	Asp	Ala	Leu	Glu	Val	Met	Ser	Asp	Gln	Glu	Leu	Lys	Glu	Leu	Phe	
290					295					300						
Lys	Glu	Ala	Pro	Phe	Ser	Glu	Phe	Phe	Leu	Asp	Pro	Gly	Thr	Ser	Val	
305					310					315					320	
Leu	Asp	Thr	Cys	Arg	Lys	Ala	Asn	Ala	Ile	Pro	Asp	Gly	Pro	Arg	Gly	
325					330					335						
Tyr	Arg	Met	Ile	Thr	Glu	Gly	Gly	Val	Ser	Ile	Asn	His	Gln	Gln	Val	
340					345					350						
Thr	Asn	Pro	Glu	Ser	Val	Leu	Ile	Val	Gly	Gln	His	Ile	Leu	Lys	Asn	
355					360					365						







	245		250		255
Ser Arg Ile	Pro Gln Val Val Thr Asp	Leu Leu Pro Ser	Leu Gln Lys		
	260	265	270		
Leu Ser Leu	Asp Asn Glu Gly Ser Lys	Leu Val Val	Leu Asn Asn Leu		
	275	280	285		
Lys Lys Met	Val Asn Leu Lys Ser Leu Glu	Leu Ile Ser Cys Asp	Leu		
	290	295	300		
Glu Arg Ile	Pro His Ser Ile Phe Ser	Leu Asn Asn Leu His	Glu Leu		
	305	310	315	320	
Asp Leu Arg	Glu Asn Asn Leu Lys Thr	Val Glu Glu Ile Ile	Ser Phe		
	325	330	335		
Gln His Leu	Gln Asn Leu Ser Cys Leu Lys	Leu Trp His Asn Asn Ile			
	340	345	350		
Ala Tyr Ile	Pro Ala Gln Ile Gly Ala Leu Ser	Asn Leu Glu Gln Leu			
	355	360	365		
Ser Leu Asp	His Asn Asn Ile Glu Asn Leu Pro	Leu Gln Leu Phe Leu			
	370	375	380		
Cys Thr Lys	Leu His Tyr Leu Asp Leu Ser Tyr	Asn His Leu Thr Phe			
	385	390	395	400	
Ile Pro Glu	Glu Ile Gln Tyr Leu Ser Asn Leu Gln Tyr	Phe Ala Val			
	405	410	415		
Thr Asn Asn	Asn Ile Glu Met Leu Pro Asp Gly Leu Phe	Gln Cys Lys			
	420	425	430		
Lys Leu Gln	Cys Leu Leu Leu Gly Lys Asn Ser Leu Met	Asn Leu Ser			
	435	440	445		
Pro His Val	Gly Glu Leu Ser Asn Leu Thr His Leu Glu	Leu Ile Gly			
	450	455	460		
Asn Tyr Leu	Glu Thr Leu Pro Pro Glu Leu Glu Gly Cys Gln Ser	Leu			
	465	470	475	480	
Lys Arg Asn	Cys Leu Ile Val Glu Glu Asn Leu Leu Asn Thr	Leu Pro			
	485	490	495		
Leu Pro Val	Thr Glu Arg Leu Gln Thr Cys Leu Asp Lys Cys				
	500	505	510		

<210> 5136  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 5136  
 Met Leu Leu Leu Ala Phe Val Thr Ser Phe Phe Tyr Leu Leu Tyr Ser  
 1 5 10 15











Gln	Gly	Ala	Gly	Phe	Ser	Leu	Arg	Tyr	Glu	Ile	Phe	Lys	Thr	Gly	Ser	
130						135					140					
Glu	Asp	Cys	Ser	Lys	Asn	Phe	Thr	Ser	Pro	Asn	Gly	Thr	Ile	Glu	Ser	
145					150					155					160	
Pro	Gly	Phe	Pro	Glu	Lys	Tyr	Pro	His	Asn	Leu	Asp	Cys	Thr	Phe	Thr	
				165					170					175		
Ile	Leu	Ala	Lys	Pro	Lys	Met	Glu	Ile	Ile	Leu	Gln	Phe	Leu	Ile	Phe	
			180					185					190			
Asp	Leu	Glu	His	Asp	Pro	Leu	Gln	Val	Gly	Glu	Gly	Asp	Cys	Lys	Tyr	
	195						200					205				
Asp	Trp	Leu	Asp	Ile	Trp	Asp	Gly	Ile	Pro	His	Val	Gly	Pro	Leu	Ile	
	210					215					220					
Gly	Lys	Tyr	Cys	Gly	Thr	Lys	Thr	Pro	Ser	Glu	Leu	Arg	Ser	Ser	Thr	
225					230					235					240	
Gly	Ile	Leu	Ser	Leu	Thr	Phe	His	Thr	Asp	Met	Ala	Val	Ala	Lys	Asp	
				245					250					255		
Gly	Phe	Ser	Ala	Arg	Tyr	Tyr	Leu	Val	His	Gln	Glu	Pro	Leu	Glu	Asn	
			260					265					270			
Phe	Gln	Cys	Asn	Val	Pro	Leu	Gly	Met	Glu	Ser	Gly	Arg	Ile	Ala	Asn	
	275						280					285				
Glu	Gln	Ile	Ser	Ala	Ser	Ser	Thr	Tyr	Ser	Asp	Gly	Arg	Trp	Thr	Pro	
	290					295					300					
Gln	Gln	Ser	Arg	Leu	His	Gly	Asp	Asp	Asn	Gly	Trp	Thr	Pro	Asn	Leu	
305					310					315					320	
Asp	Ser	Asn	Lys	Glu	Tyr	Leu	Gln	Val	Asp	Leu	Arg	Phe	Leu	Thr	Met	
			325						330					335		
Leu	Thr	Ala	Ile	Ala	Thr	Gln	Gly	Ala	Ile	Ser	Arg	Glu	Thr	Gln	Asn	
		340					345						350			
Gly	Tyr	Tyr	Val	Lys	Ser	Tyr	Lys	Leu	Glu	Val	Ser	Thr	Asn	Gly	Glu	
	355						360					365				
Asp	Trp	Met	Val	Tyr	Arg	His	Gly	Lys	Asn	His	Lys	Val	Phe	Gln	Ala	
	370					375					380					
Asn	Asn	Asp	Ala	Thr	Glu	Val	Val	Leu	Asn	Lys	Leu	His	Ala	Pro	Leu	
385					390					395					400	
Leu	Thr	Arg	Phe	Val	Arg	Ile	Arg	Pro	Gln	Thr	Trp	His	Ser	Gly	Ile	
			405						410					415		
Ala	Leu	Arg	Leu	Glu	Leu	Phe	Gly	Cys	Arg	Ser	Gln	Met	Leu	Pro	Ala	
			420				425						430			
Pro	Thr	Cys	Trp	Gly	Cys	Ser	Gln	Ala	Ser	Leu	Gln	Thr	Pro	Arg	Ser	
		435					440					445				



Pro Pro Leu Pro Pro Arg Asn Thr Ser Gly Ala Pro Val Gln Pro Ala  
450 455 460

Trp Ser Ala Ala Ala Arg Ala Gly Ser Leu Glu Ser Leu Arg Pro Ser  
465 470 475 480

Pro Val Arg Ser Gly Phe Arg  
485

<210> 5143  
<211> 33  
<212> PRT  
<213> Homo sapiens

<400> 5143  
Met Pro Ile His Arg Phe Ser Val Leu Ala Leu Leu Val Met Pro Pro  
1 5 10 15

Leu Met Asn Gly Arg Gln Val Gln Val Lys Glu Trp Cys Phe Trp Asn  
20 25 30

Pro

<210> 5144  
<211> 41  
<212> PRT  
<213> Homo sapiens

<400> 5144  
Val Gly Gly Trp Ser Trp Val Trp Ser Pro Trp Leu Ala Ala Phe Val  
1 5 10 15

Cys Ala Arg Ala Ala Arg Asp Pro Gly Pro Ser Val Arg Trp Arg Pro  
20 25 30

Pro Phe Ala Arg Ser Trp Arg Arg Pro  
35 40

<210> 5145  
<211> 26  
<212> PRT  
<213> Homo sapiens

<400> 5145  
Asp Val Val Cys Leu Phe Leu Phe Val Tyr Val Leu Ile Lys His Val  
1 5 10 15

Asp Tyr Phe Tyr Lys Thr Lys Gly Lys Met  
20 25

<210> 5146  
<211> 26



<212> PRT  
<213> Homo sapiens

<400> 5146  
Met Gly Thr Cys Thr Trp Ala Leu Ser Gly Pro Pro Ser Ser Ala Asp  
1 5 10 15  
Ser Ala Ser Arg Leu Phe Ser Pro Pro Arg  
20 25

<210> 5147  
<211> 52  
<212> PRT  
<213> Homo sapiens

<400> 5147  
Met Ile Ile Tyr Val Glu Asn Pro Lys Glu Leu Thr Thr Lys Leu Leu  
1 5 10 15  
Lys Val Phe Leu Val Leu Ile Ser Gln Leu Ala Arg Leu Lys Asp Thr  
20 25 30  
Arg Leu Ile His Lys Ser Gln Ser Leu Phe Tyr Met Ala Ser Thr Asn  
35 40 45  
Glu Thr Arg Ser  
50

<210> 5148  
<211> 19  
<212> PRT  
<213> Homo sapiens

<400> 5148  
Met Trp Ser Leu Lys Tyr Ser Ser Tyr Lys Ile Phe Val Leu Leu Ile  
1 5 10 15  
Phe Ala Gly

<210> 5149  
<211> 69  
<212> PRT  
<213> Homo sapiens

<400> 5149  
Met Asp Gly Gly Gln Ala Val Pro Thr Leu Leu Gly Gly Ala Gly Leu  
1 5 10 15  
Gly Gly Val Phe His Cys Val Pro Phe Ser Pro Arg Pro Val Pro Arg  
20 25 30  
Val Trp Gly Ala Leu Leu Arg Thr Pro Pro Arg Ala Pro Ser Ser Arg  
35 40 45



Leu Trp Thr Pro Arg Gln Glu Arg Pro Ser Ala Ala Lys Arg Asn Lys  
 50 55 60

Ile Leu Ala Ser Arg  
 65

<210> 5150  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 5150  
 Met Ile Val Leu Ile Cys Val Ile Val Phe Ile Ile Ile Leu Phe Ile  
 1 5 10 15

Val Leu Phe Ala Thr Gly Ala Phe Ser  
 20 25

<210> 5151  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 5151  
 Met Lys Ala Val Ile His Gln Lys Tyr Gly Phe Leu His Leu Leu Phe  
 1 5 10 15

Leu Leu Phe Leu Ser Leu His Arg Ile Ser Ser Ala Thr Phe Thr Leu  
 20 25 30

Asn Thr Lys Ser Ser Ser  
 35

<210> 5152  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 5152  
 Phe Leu Phe Phe Gly Val Leu Pro Val Cys Lys Gly Glu Phe Val His  
 1 5 10 15

Trp Glu Arg Pro Gly Ser  
 20

<210> 5153  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 5153  
 Met Ala Leu Ala Val Leu Ser Pro Cys Pro Pro Leu Val Gly Thr Ser  
 1 5 10 15







<210> 5156  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 5156  
 Met Arg Cys Phe Leu Phe Leu Leu Gly Gly Ala Arg Phe Ile Cys Gln  
 1 5 10 15  
 Leu Ser Thr Val Arg Lys His Phe Gly Ser Pro Leu Ser Asp Ile  
 20 25 30

<210> 5157  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 5157  
 Met Pro Phe Asn Lys Arg Ser His Ser Pro Ala Ala Leu Cys Pro  
 1 5 10 15

<210> 5158  
 <211> 62  
 <212> PRT  
 <213> Homo sapiens

<400> 5158  
 Arg Arg Ala Val Arg Trp Glu Leu Leu Val Leu Leu Leu Leu Leu  
 1 5 10 15  
 Pro Thr Leu Arg Arg Pro Gly Pro Arg Cys Arg Pro Gly Pro Gly Cys  
 20 25 30  
 Arg Leu Arg Pro Arg Arg Pro Arg Pro Arg Val Arg Pro Ser Gln Asp  
 35 40 45  
 Ala Ala Pro Gly Arg Val Ser Thr Ser Trp Pro His Leu Pro  
 50 55 60

<210> 5159  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 5159  
 Met Ile Gln Trp Phe His Lys Gly Leu Phe Pro Phe Gly Ser Ala Leu  
 1 5 10 15  
 Leu Leu Val Ala Ala Met  
 20



<210> 5160  
 <211> 405  
 <212> PRT  
 <213> Homo sapiens

<400> 5160  
 Met Gly Phe Cys Leu Ser Ser Leu Leu Ala Trp Cys Val Asp Cys Phe  
 1 5 10 15  
 Phe Ser Leu Cys Ser Phe Gly Val Lys Leu Met Asp Phe Gln Ala His  
 20 25 30  
 Arg Arg Gly Gly Thr Leu Asn Arg Lys His Ile Ser Pro Ala Phe Gln  
 35 40 45  
 Pro Pro Leu Pro Pro Thr Asp Gly Ser Thr Val Val Pro Ala Gly Pro  
 50 55 60  
 Glu Pro Pro Pro Gln Ser Ser Arg Ala Glu Ser Ser Ser Gly Gly Gly  
 65 70 75 80  
 Thr Val Pro Ser Ser Ala Gly Ile Leu Glu Gln Gly Pro Ser Pro Gly  
 85 90 95  
 Asp Gly Ser Pro Pro Lys Pro Lys Asp Pro Val Ser Ala Ala Val Pro  
 100 105 110  
 Ala Pro Gly Arg Asn Asn Ser Gln Ile Ala Ser Gly Gln Asn Gln Pro  
 115 120 125  
 Gln Ala Ala Ala Gly Ser His Gln Leu Ser Met Gly Gln Pro His Asn  
 130 135 140  
 Ala Ala Gly Pro Ser Pro His Thr Leu Arg Arg Ala Val Lys Lys Pro  
 145 150 155 160  
 Ala Pro Ala Pro Pro Lys Pro Gly Asn Pro Pro Pro Gly His Pro Gly  
 165 170 175  
 Gly Gln Ser Ser Ser Gly Thr Ser Gln His Pro Pro Ser Leu Ser Pro  
 180 185 190  
 Lys Pro Pro Thr Arg Ser Pro Ser Pro Pro Thr Gln His Thr Gly Gln  
 195 200 205  
 Pro Pro Gly Gln Pro Ser Ala Pro Ser Gln Leu Ser Ala Pro Arg Arg  
 210 215 220  
 Tyr Ser Ser Ser Leu Ser Pro Ile Gln Ala Pro Asn His Pro Pro Pro  
 225 230 235 240  
 Gln Pro Pro Thr Gln Ala Thr Pro Leu Met His Thr Lys Pro Asn Ser  
 245 250 255  
 Gln Gly Pro Pro Asn Pro Met Ala Leu Pro Ser Glu His Gly Leu Glu  
 260 265 270  
 Gln Pro Ser His Thr Pro Pro Gln Thr Pro Thr Pro Pro Ser Thr Pro  
 275 280 285  
 Pro Leu Gly Lys Gln Asn Pro Ser Leu Pro Ala Pro Gln Thr Leu Ala







<210> 5163  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 5163  
 Met Ser Pro Thr Gly Leu Leu Val Val Phe Ala Pro Val Val Leu Gly  
 1 5 10 15  
 Leu Lys Ala Ile Thr Leu Ala Ala Leu Leu Ala Leu Ala Thr Ser  
 20 25 30  
 Arg Arg Ser Pro Gly Gln Glu Asp Val Lys Thr Thr Gly Pro Ala Gly  
 35 40 45  
 Ala Met Asn Thr Leu Ala Trp Ser Lys Gly Gln Glu  
 50 55 60

<210> 5164  
 <211> 54  
 <212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SITE  
 <222> (24)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (25)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5164  
 Met Leu Cys Ile Ser Val Phe Cys Leu Leu Met Thr Leu Leu Phe Pro  
 1 5 10 15  
 Phe Val Leu Val Val Leu Tyr Xaa Xaa Leu Thr Phe Arg Ser Ser Trp  
 20 25 30  
 Gln Tyr Cys Phe Leu His Phe Ile Trp Asp Leu Ser Leu Phe Leu Ile  
 35 40 45  
 Asp His Val Cys His Cys  
 50

<210> 5165  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<400> 5165  
 Met Arg Gly Leu Lys Pro Ser Trp Pro Gln Ala Ser Leu Ser Pro Pro  
 1 5 10 15



Pro His Ala Leu Pro Cys Pro Cys Arg Val Ala Met Gly Phe  
 20 25 30

<210> 5166  
 <211> 44  
 <212> PRT  
 <213> Homo sapiens

<400> 5166  
 Met Asn Asn Thr Cys Leu Ala Val Leu His Val Val Met Cys Leu Ala  
 1 5 10 15  
 Trp Ser Phe Leu Trp Ser Leu Leu Leu His Gly Phe Ile His Ser Phe  
 20 25 30  
 Phe Ser Phe Ile Ser Ser Cys Ala Val Thr Cys Thr  
 35 40

<210> 5167  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 5167  
 Met Ser Ser Phe Ser Ser Ala Leu Phe Cys Pro Leu Phe Phe Gly Ser  
 1 5 10 15  
 His Phe Phe Leu Ser Ile Trp Val Gln Met Ala Phe Tyr Met Ile Glu  
 20 25 30  
 Asn Cys Lys Gly Lys Arg  
 35

<210> 5168  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 5168  
 Met Met Ala Met Leu Tyr Thr Met Leu Ala Leu Asp Ile Leu Val Cys  
 1 5 10 15  
 Gly

<210> 5169  
 <211> 34  
 <212> PRT  
 <213> Homo sapiens

<400> 5169  
 Met Leu Trp Phe Trp Gly Leu Trp Leu Gln Leu Trp Met Trp Gln Leu



1 5 10 15  
 Trp Val Leu Leu Phe Gly Asn Tyr Pro His Glu Val Pro Arg Ser Cys  
 20 25 30

Met Leu

<210> 5170  
 <211> 61  
 <212> PRT  
 <213> Homo sapiens

<400> 5170  
 Met Glu Leu Val Leu Ala Ala Ala Gly Ala Leu Leu Phe Cys Gly Phe  
 1 5 10 15  
 Ile Ile Tyr Asp Thr His Ser Leu Met His Lys Leu Ser Pro Glu Glu  
 20 25 30  
 Tyr Val Leu Ala Ala Ile Ser Leu Tyr Leu Asp Ile Ile Asn Leu Phe  
 35 40 45  
 Leu His Leu Leu Arg Phe Leu Glu Ala Val Asn Lys Lys  
 50 55 60

<210> 5171  
 <211> 61  
 <212> PRT  
 <213> Homo sapiens

<400> 5171  
 Met Pro Thr Thr Val Pro Ser Ser Met Phe Pro Cys Ser Leu Phe Leu  
 1 5 10 15  
 Leu Trp Ser Gln Leu Trp Glu Leu Leu Trp Ser Gln Leu Trp Gly Leu  
 20 25 30  
 Leu Gln Leu Trp Gly Trp Trp Leu Leu Pro Glu Pro Pro Gln Ala Pro  
 35 40 45  
 Ser Leu Pro Pro Ala Pro Ala Pro Glu Pro Arg Leu Leu  
 50 55 60

<210> 5172  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<400> 5172  
 Met Thr Ser Met Leu Leu Leu Val Arg Trp Ile Pro Lys Leu Leu Leu  
 1 5 10 15  
 Leu Leu Leu Ser Cys Met Ala Pro Gly Tyr Trp Gly Arg Ser Leu Leu  
 20 25 30



Phe Leu Ile Leu Lys Ala Gly Leu  
35 40

<210> 5173  
<211> 59  
<212> PRT  
<213> Homo sapiens

<400> 5173  
Pro His Leu Pro Leu Met Ile Val Asn Leu Ile Leu His Phe Ser Cys  
1 5 10 15

Tyr Cys Trp Cys Lys Lys His Leu Leu Tyr Gln Asp Phe Lys Asn Gln  
20 25 30

Ser Asp Lys Ser Leu Ile Ser Leu Ile Ile Ile Thr Asp Lys Ser Ile  
35 40 45

Glu Phe Ala Ser Asp Tyr Phe Phe Phe Ser Ser  
50 55

<210> 5174  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 5174  
Met Gly Phe Glu Pro Gly Trp Pro Gly Lys Leu  
1 5 10

<210> 5175  
<211> 39  
<212> PRT  
<213> Homo sapiens

<400> 5175  
Met Leu Leu Glu Lys Val Ile Arg Leu Arg Cys Ser Cys Phe Val Leu  
1 5 10 15

Leu Cys Phe Ser Leu Ser Trp Val Gly Val Ser Ser Ser Asn Asp Val  
20 25 30

Gln Val Asp Leu Phe Ser His  
35

<210> 5176  
<211> 71  
<212> PRT  
<213> Homo sapiens

<400> 5176  
Met Asn Gly Lys Trp Ser Leu Met Cys Ser Val Ser Leu Val Ala Leu







<213> Homo sapiens

<400> 5180

Met Leu His Cys Tyr Pro Ala Leu Pro Ser Leu Ile Phe Leu Gly Val  
1 5 10 15

Ala Trp Gly Phe  
20

<210> 5181

<211> 74

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (74)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5181

Met Phe Thr Tyr Trp Phe Thr Met Leu Phe Met Cys Lys Leu Ser Lys  
1 5 10 15

Cys Lys Leu Asn Ile Asn Val His Ala Leu Pro Lys Lys Lys Lys Lys  
20 25 30

Xaa Ser Arg Gly Gly Pro Val Pro Asn Ser Pro Tyr Ser Glu Ser Tyr  
35 40 45

Tyr Asn Ser Leu Ala Val Val Leu Gln Arg Arg Asp Trp Gly Asn Pro  
50 55 60

Gly Val Thr Gln Leu Asn Arg Leu Ala Xaa  
65 70

<210> 5182

<211> 13

<212> PRT

<213> Homo sapiens

<400> 5182

Gly Asn Lys Arg Ile Lys Arg Leu Met Pro Tyr Tyr Phe  
1 5 10

<210> 5183

<211> 10

<212> PRT

<213> Homo sapiens

<400> 5183



Phe Gly Tyr Phe Gln Ile Tyr Val Phe Ser  
 1 5 10

<210> 5184  
 <211> 44  
 <212> PRT  
 <213> Homo sapiens

<400> 5184  
 Met Phe Ser Cys Met Ser Asn Leu Ile Tyr Leu Leu Pro Val Thr Tyr  
 1 5 10 15

Leu Ile Met Trp Leu Leu Ile Gly Ser His Ser Pro Phe Leu Ser Arg  
 20 25 30

Tyr Ser Thr Thr Phe Gln Asn Ser His Trp Gln Val  
 35 40

<210> 5185  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens

<400> 5185  
 Met Arg Ser Trp Ile Asp Phe Val Ser Ile Tyr Ser Ser Ala Leu Cys  
 1 5 10 15

Ile Pro Trp Phe Leu His Pro Trp Ile Gln Pro Thr Lys Ala Arg Lys  
 20 25 30

Tyr

<210> 5186  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 5186  
 Met Pro Cys Trp Val Thr Gly Trp Thr Cys Cys Ser Leu Gln Ser His  
 1 5 10 15

Ser Gln Pro Ala His Met Pro Pro Ser Lys Arg Ile Leu Leu Phe Thr  
 20 25 30

Ser Leu Leu Leu Gln Pro  
 35

<210> 5187  
 <211> 271  
 <212> PRT  
 <213> Homo sapiens

0506030405060708091011121314151617181920212223242526272829303132333435363738394041424344454647484950515253545556575859606162636465666768697071727374757677787980818283848586878889909192939495969798991001011021031041051061071081091101111121131141151161171181191201211221231241251261271281291301311321331341351361371381391401411421431441451461471481491501511521531541551561571581591601611621631641651661671681691701711721731741751761771781791801811821831841851861871881891901911921931941951961971981992002012022032042052062072082092102112122132142152162172182192202212222232242252262272282292302312322332342352362372382392402412422432442452462472482492502512522532542552562572582592602612622632642652662672682692702712722732742752762772782792802812822832842852862872882892902912922932942952962972982993003013023033043053063073083093103113123133143153163173183193203213223233243253263273283293303313323333343353363373383393403413423433443453463473483493503513523533543553563573583593603613623633643653663673683693703713723733743753763773783793803813823833843853863873883893903913923933943953963973983994004014024034044054064074084094104114124134144154164174184194204214224234244254264274284294304314324334344354364374384394404414424434444454464474484494504514524534544554564574584594604614624634644654664674684694704714724734744754764774784794804814824834844854864874884894904914924934944954964974984995005015025035045055065075085095105115125135145155165175185195205215225235245255265275285295305315325335345355365375385395405415425435445455465475485495505515525535545555565575585595605615625635645655665675685695705715725735745755765775785795805815825835845855865875885895905915925935945955965975985996006016026036046056066076086096106116126136146156166176186196206216226236246256266276286296306316326336346356366376386396406416426436446456466476486496506516526536546556566576586596606616626636646656666676686696706716726736746756766776786796806816826836846856866876886896906916926936946956966976986997007017027037047057067077087097107117127137147157167177187197207217227237247257267277287297307317327337347357367377387397407417427437447457467477487497507517527537547557567577587597607617627637647657667677687697707717727737747757767777787797807817827837847857867877887897907917927937947957967977987998008018028038048058068078088098108118128138148158168178188198208218228238248258268278288298308318328338348358368378388398408418428438448458468478488498508518528538548558568578588598608618628638648658668678688698708718728738748758768778788798808818828838848858868878888898908918928938948958968978988999009019029039049059069079089099109119129139149159169179189199209219229239249259269279289299309319329339349359369379389399409419429439449459469479489499509519529539549559569579589599609619629639649659669679689699709719729739749759769779789799809819829839849859869879889899909919929939949959969979989991000100110021003100410051006100710081009101010111012101310141015101610171018101910201021102210231024102510261027102810291030103110321033103410351036103710381039104010411042104310441045104610471048104910501051105210531054105510561057105810591060106110621063106410651066106710681069107010711072107310741075107610771078107910801081108210831084108510861087108810891090109110921093109410951096109710981099110011001110021100311004110051100611007110081100911010110111101211013110141101511016110171101811019110201102111022110231102411025110261102711028110291103011031110321103311034110351103611037110381103911040110411104211043110441104511046110471104811049110501105111052110531105411055110561105711058110591106011061110621106311064110651106611067110681106911070110711107211073110741107511076110771107811079110801108111082110831108411085110861108711088110891109011091110921109311094110951109611097110981109911100111001111002111003111004111005111006111007111008111009111010111011111012111013111014111015111016111017111018111019111020111021111022111023111024111025111026111027111028111029111030111031111032111033111034111035111036111037111038111039111040111041111042111043111044111045111046111047111048111049111050111051111052111053111054111055111056111057111058111059111060111061111062111063111064111065111066111067111068111069111070111071111072111073111074111075111076111077111078111079111080111081111082111083111084111085111086111087111088111089111090111091111092111093111094111095111096111097111098111099111100111100111110021111003111100411110051111006111100711110081111009111101011110111111012111101311110141111015111101611110171111018111101911110201111021111102211110231111024111102511110261111027111102811110291111030111103111110321111033111103411110351111036111103711110381111039111104011110411111042111104311110441111045111104611110471111048111104911110501111051111105211110531111054111105511110561111057111105811110591111060111106111110621111063111106411110651111066111106711110681111069111107011110711111072111107311110741111075111107611110771111078111107911110801111081111108211110831111084111108511110861111087111108811110891111090111109111110921111093111109411110951111096111109711110981111099111110011111001111110021111100311111004111110051111100611111007111110081111100911111010111110111111101211111013111110141111101511111016111110171111101811111019111110201111102111111022111110231111102411111025111110261111102711111028111110291111103011111031111110321111103311111034111110351111103611111037111110381111103911111040111110411111104211111043111110441111104511111046111110471111104811111049111110501111105111111052111110531111105411111055111110561111105711111058111110591111106011111061111110621111106311111064111110651111106611111067111110681111106911111070111110711111107211111073111110741111107511111076111110771111107811111079111110801111108111111082111110831111108411111085111110861111108711111088111110891111109011111091111110921111109311111094111110951111109611111097111110981111109911111100111111001111111002111111003111111004111111005111111006111111007111111008111111009111111010111111011111110121111110131111110141111110151111110161111110171111110181111110191111110201111110211111110221111110231111110241111110251111110261111110271111110281111110291111110301111110311111110321111110331111110341111110351111110361111110371111110381111110391111110401111110411111110421111110431111110441111110451111110461111110471111110481111110491111110501111110511111110521111110531111110541111110551111110561111110571111110581111110591111110601111110611111110621111110631111110641111110651111110661111110671111110681111110691111110701111110711111110721111110731111110741111110751111110761111110771111110781111110791111110801111110811111110821111110831111110841111110851111110861111110871111110881111110891111110901111110911111110921111110931111110941111110951111110961111110971111110981111110991111111001111111001111111100211111110031111111004111111100511111110061111111007111111100811111110091111111010111111101111111101211111110131111111014111111101511111110161111111017111111101811111110191111111020111111102111111110221111111023111111102411111110251111111026111111102711111110281111111029111111103011111110311111111032111111103311111110341111111035111111103611111110371111111038111111103911111110401111111041111111104211111110431111111044111111104511111110461111111047111111104811111110491111111050111111105111111110521111111053111111105411111110551111111056111111105711111110581111111059111111106011111110611111111062111111106311111110641111111065111111106611111110671111111068111111106911111110701111111071111111107211111110731111111074111111107511111110761111111077111111107811111110791111111080111111108111111110821111111083111111108411111110851111111086111111108711111110881111111089111111109011111110911111111092111111109311111110941111111095111111109611111110971111111098111111109911111111001111111100111111111002111111110031111111100411111111005111111110061111111100711111111008111111110091111111101011111111011111111101211111111013111111110141111111101511111111016111111110171111111101811111111019111111110201111111102111111111022111111110231111111102411111111025111111110261111111102711111111028111111110291111111103011111111031111111110321111111103311111111034111111110351111111103611111111037111111110381111111103911111111040111111110411111111104211111111043111111110441111111104511111111046111111110471111111104811111111049111111110501111111105111111111052111111110531111111105411111111055111111110561111111105711111111058111111110591111111106011111111061111111110621111111106311111111064111111110651111111106611111111067111111110681111111106911111111070111111110711111111107211111111073111111110741111111107511111111076111111110771111111107811111111079111111110801111111108111111111082111111110831111111108411111111085111111110861111111108711111111088111111110891111111109011111111091111111110921111111109311111111094111111110951111111109611111111097111111110981111111109911111111100111111111001111111111002111111111003111111111004111111111005111111111006111111111007111111111008111111111009111111111010111111111011111111110121111111110131111111110141111111110151111111110161111111110171111111110181111111110191111111110201111111110211111111110221111111110231111111110241111111110251111111110261111111110271111111110281111111110291111111110301111111110311111111110321111111110331111111110341111111110351111111110361111111110371111111110381111111110391111111110401111111110411111111110421111111110431111111110441111111110451111111110461111111110471111111110481111111110491111111110501111111110511111111110521111111110531111111110541111111110551111111110561111111110571111111110581111111110591111111110601111111110611111111110621111111110631111111110641111111110651111111110661111111110671111111110681111111110691111111110701111111110711111111110721111111110731111111110741111111110751111111110761111111110771111111110781111111110791111111110801111111110811111111110821111111110831111111110841111111110851111111110861111111110871111111110881111111110891111111110901111111110911111111110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Thr Ala Ile Gly Arg Thr Cys Ile Thr Asp Leu Gln Leu Thr Val Gly  
195 200 205

Gly Pro Xaa Pro Ala Ala Pro Leu Leu Arg Gly Ala Xaa Cys Asp Cys  
210 215 220

Ser Gly Pro Ile Ser Pro Ser Leu Xaa Gly Val Ala Xaa Arg Gln Pro  
225 230 235 240

Trp Ala Pro Ser Trp Pro Gly Ser Tyr Ala Phe Ile Met Ser Leu Asn  
245 250 255

Lys Arg His Ser Ser Gly Asp Gly Asn Ser Lys Leu Lys Xaa Glu  
260 265 270

<210> 5188  
<211> 38  
<212> PRT  
<213> Homo sapiens

<400> 5188  
Met Leu Gly Ile Ala Thr Val Phe Phe Phe Gly Leu Gly Leu Glu Val  
1 5 10 15

Val Gly Lys Asn Ala Cys Gln Pro Ala Leu His Leu Gly Leu Gly Ala  
20 25 30

Cys Gln Leu Pro Ala Leu  
35

<210> 5189  
<211> 18  
<212> PRT  
<213> Homo sapiens

<400> 5189  
Met Gly Asp Leu Lys Leu Val Leu Leu Ile Ser Glu Leu Ile Ile Glu  
1 5 10 15

Phe Pro

<210> 5190  
<211> 31  
<212> PRT  
<213> Homo sapiens

<400> 5190  
Met Pro Arg Ser Phe Leu Ser Thr Phe Leu Phe Phe Gly Thr Val Arg  
1 5 10 15

Gly Phe Thr Leu Ser Ser Trp Thr Ser Leu Pro Gln Ser Trp Asn  
20 25 30



<210> 5191  
 <211> 37  
 <212> PRT  
 <213> Homo sapiens

<400> 5191  
 Leu Pro Phe Leu Ser Leu Cys Cys Ala Met Ser Ser Ser Ser Pro Leu  
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 Val Leu Gly Ala Trp Gln Glu Val Ala Ala Ile Gly Cys Phe Leu Asn  
                   20                  25                  30  
 Glu Gly Ala Asn Gln  
                   35

<210> 5192  
 <211> 68  
 <212> PRT  
 <213> Homo sapiens

<400> 5192  
 Met Asp Ser Ala Leu Ala Leu Cys Val Thr Leu Gly Ser Ser Val Pro  
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 Leu Ser Val Leu Pro Gln Phe Pro Ser Leu Tyr Asn Val Ala Gly Glu  
                   20                  25                  30  
 Gly Glu Asp Gly Thr Arg Leu Asp His Val Ala Ser Glu Val Pro Ser  
                   35                  40                  45  
 Arg Ser Asn Tyr Arg Ser Lys Ser Pro Arg Lys Gln Val Ser Lys Ala  
   50                  55                  60  
 Leu Lys Phe Leu  
   65

<210> 5193  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 5193  
 Met Val Gly Glu Thr Cys Leu Leu Phe His Leu Gly Val Thr Cys Ser  
   1                  5                  10                  15  
 Leu Ala Trp Arg Arg Arg Glu Lys Thr Glu Lys Gly Val Ile Pro Asn  
                   20                  25                  30  
 Ile Cys Ile Ala Gln Ser His Thr Arg Asp Leu Ile Ser Leu Ala Ile  
                   35                  40                  45  
 Leu Cys  
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<210> 5194  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 5194  
 Met Val Met Val Val Val Met Met Ala Val Val Leu Tyr Phe Cys Ala  
           1                  5                  10                  15  
 Pro Ser Gly Pro Ser His  
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<210> 5195  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

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 Phe Thr Ser Gly Gln Lys Pro Leu Asp Thr Pro Gly Leu Gly Ala Ala  
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 Val Leu Ser Val Arg Lys Ala Gly Leu Lys Met Arg Ser His Leu Thr  
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 Pro Ser Val Cys Thr Val Pro Ser Pro Gly Ser  
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 <212> PRT  
 <213> Homo sapiens

<400> 5196  
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 Cys Glu Ile Val Thr Leu Asp Arg Asp Ser Ser Gln Pro Arg Arg Thr  
           35                  40                  45  
 Ile Ala Arg Gln Thr Ala Arg Cys Ala Cys Arg Lys Gly Gln Ile Ala  
           50                  55                  60  
 Gly Thr Thr Arg Ala Arg Pro Ala Cys Val Asp Ala Arg Ile Ile Lys  
           65                  70                  75                  80  
 Thr Lys Gln Trp Cys Asp Met Leu Pro Cys Leu Glu Gly Glu Gly Cys  
                   85                  90                  95  
 Asp Leu Leu Ile Asn Arg Ser Gly Trp Thr Cys Thr Gln Pro Gly Gly  
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Arg Ile Lys Thr Thr Thr Val Ser  
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<212> PRT  
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Ser Leu Ser Ala Thr Pro Gly Trp Ser Gly Pro Arg Cys Gly Ser Ala  
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Leu Ser Thr Pro Arg Ala Pro Arg Pro Ser Glu Gly Ala Pro Ala Gly  
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Ala Ser Asp Thr Leu Gln Phe Arg Ala Val Gly Gly Leu Gly His Ile  
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Pro Val Pro Trp Leu  
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<211> 32  
<212> PRT  
<213> Homo sapiens

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Leu Ser Thr Leu Gln Leu Tyr Leu Phe Cys Ser Ser Thr Arg Arg Ser  
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<210> 5199  
<211> 282  
<212> PRT  
<213> Homo sapiens

<400> 5199  
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<400> 5200

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Gly	Ile 50	Ser	Ser	Glu	Gly	Asn 55	Leu	Asn	Thr	Leu	Ser 60	Cys	Asp	Pro	Gly
His 65	Ser	Arg	Gly	Phe	Cys 70	Gly	Ala	Gly	Gly	Ser 75	Ser	Ser	Arg	Pro	Ser 80
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Gln 145	Gly	His	Thr	Ala	Gly 150	Arg	Lys	Ser	Lys	Gly 155	Ala	Lys	Gln	Ser	Gln 160
His	Gly	Ser	Gln	His 165	His	Ala	His	Ser	Pro 170	Leu	Glu	Gln	His	Pro 175	Gln
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Ser 210	Ser	Ala	Arg	His	Ser	Ser 215	Glu	Asp	Ser	Asp	Ile 220	Thr	Ser	Leu	Ile
Glu 225	Ala	Met	Asp	Lys	Asp 230	Phe	Asp	His	His	Asp 235	Ser	Pro	Ala	Leu	Glu 240
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Lys	Glu	Lys 275	Lys	Gly	Lys	Gly	Lys 280	Pro	Gln	Glu	Asp	Glu 285	Leu	Lys	Asp
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Pro 305	Asp	Thr	Glu	Pro	Leu 310	Leu	Lys	Glu	Asp	Thr 315	Glu	Lys	Gln	Lys	Gly 320







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Ser	Ala	Ser	Glu	Arg	Ala	Cys	Trp	Pro	Cys	Thr	Ile	Ile	Ser	Pro	Pro	
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Val	Ser	Pro	His	Val	Pro	Ala	Leu	Ala	Lys	Gly	Leu	Ile	Cys	Arg	Thr	
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 <212> PRT



<213> Homo sapiens

<400> 5202

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Ser Leu

<210> 5203

<211> 379

<212> PRT

<213> Homo sapiens

<400> 5203

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Ala Gly Asp Cys Ser Gly Ala Arg Tyr Asn Asp Trp Ser Asp Asp Asp  
50 55 60

Asp Asp Ser Asn Glu Ser Lys Ser Ile Val Trp Tyr Pro Pro Trp Ala  
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Arg Ile Gly Thr Glu Ala Gly Thr Arg Ala Arg Ala Arg Ala Arg Ala  
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Arg Ala Thr Arg Ala Arg Arg Ala Val Gln Lys Arg Ala Ser Pro Asn  
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Ser Asp Asp Thr Val Leu Ser Pro Gln Glu Leu Gln Lys Val Leu Cys  
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Leu Val Glu Met Ser Glu Lys Pro Tyr Ile Leu Glu Ala Ala Leu Ile  
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Ala Leu Gly Asn Asn Ala Ala Tyr Ala Phe Asn Arg Asp Ile Ile Arg  
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Asp Leu Gly Gly Leu Pro Ile Val Ala Lys Ile Leu Asn Thr Arg Asp  
165 170 175

Pro Ile Val Lys Glu Lys Ala Leu Ile Val Leu Asn Asn Leu Ser Val  
180 185 190

Asn Ala Glu Asn Gln Arg Arg Leu Lys Val Tyr Met Asn Gln Val Cys  
195 200 205

Asp Asp Thr Ile Thr Ser Arg Leu Asn Ser Ser Val Gln Leu Ala Gly  
210 215 220

Leu Arg Leu Leu Thr Asn Met Thr Val Thr Asn Glu Tyr Gln His Met  
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Leu Ala Asn Ser Ile Ser Asp Phe Phe Arg Leu Phe Ser Ala Gly Asn  
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Glu Glu Thr Lys Leu Gln Val Leu Lys Leu Leu Leu Asn Leu Ala Glu  
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Asn Pro Ala Met Thr Arg Glu Leu Leu Arg Ala Gln Val Pro Ser Ser  
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Leu Gly Ser Leu Phe Asn Lys Lys Glu Asn Lys Glu Val Ile Leu Lys  
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Leu Leu Val Ile Phe Glu Asn Ile Asn Asp Asn Phe Lys Trp Glu Glu  
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Asn Glu Pro Thr Gln Asn Gln Phe Gly Glu Gly Ser Leu Phe Phe Phe  
325 330 335

Leu Lys Glu Phe Gln Val Cys Ala Asp Lys Val Leu Gly Ile Glu Ser  
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<211> 246

<212> DNA

<213> Homo sapiens

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<211> 1918

<212> DNA

<213> Homo sapiens

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<210> 5226

<211> 1920

<212> DNA

<213> Homo sapiens

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 <222> (709)  
 <223> n equals a,t,g, or c



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 <223> n equals a,t,g, or c

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[illegible]

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表 1 各試驗區之土壤性質	
試驗區	土壤性質
1. 第一試驗區	土壤 pH 值 6.5, 全氮 0.15%, 全磷 0.05%, 全鉀 0.15%, 有效磷 0.01%, 有效鉀 0.01%
2. 第二試驗區	土壤 pH 值 6.5, 全氮 0.15%, 全磷 0.05%, 全鉀 0.15%, 有效磷 0.01%, 有效鉀 0.01%
3. 第三試驗區	土壤 pH 值 6.5, 全氮 0.15%, 全磷 0.05%, 全鉀 0.15%, 有效磷 0.01%, 有效鉀 0.01%
4. 第四試驗區	土壤 pH 值 6.5, 全氮 0.15%, 全磷 0.05%, 全鉀 0.15%, 有效磷 0.01%, 有效鉀 0.01%
5. 第五試驗區	土壤 pH 值 6.5, 全氮 0.15%, 全磷 0.05%, 全鉀 0.15%, 有效磷 0.01%, 有效鉀 0.01%
6. 第六試驗區	土壤 pH 值 6.5, 全氮 0.15%, 全磷 0.05%, 全鉀 0.15%, 有效磷 0.01%, 有效鉀 0.01%
7. 第七試驗區	土壤 pH 值 6.5, 全氮 0.15%, 全磷 0.05%, 全鉀 0.15%, 有效磷 0.01%, 有效鉀 0.01%
8. 第八試驗區	土壤 pH 值 6.5, 全氮 0.15%, 全磷 0.05%, 全鉀 0.15%, 有效磷 0.01%, 有效鉀 0.01%
9. 第九試驗區	土壤 pH 值 6.5, 全氮 0.15%, 全磷 0.05%, 全鉀 0.15%, 有效磷 0.01%, 有效鉀 0.01%
10. 第十試驗區	土壤 pH 值 6.5, 全氮 0.15%, 全磷 0.05%, 全鉀 0.15%, 有效磷 0.01%, 有效鉀 0.01%

2419



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<212> DNA  
<213> Homo sapiens



<400> 5306

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<211> 1820

<212> DNA

<213> Homo sapiens

<400> 5307

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<211> 311

<212> DNA

<213> Homo sapiens

<400> 5308

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<212> DNA  
<213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens

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ggcttaacac	taatgatcag
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aataactaca	cacatacaca
taaaaagtgc	atcaaagaat
ttcttactaa	tcctttaaac
taaatccttt	tcattgtgct
ttaaagcttc	attaaggcta
gtgggcaggt	gcgtgtgaat
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ccatttaaat	gcaggcttta
gccttgtcat	cccaccatct
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ccttgcccaa	gaatgtctgt
cgtaaaacct	caggcttcca
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 <212> DNA  
 <213> Homo sapiens



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gggtgaatcat ttttctgtag gctgcgtggt tgattgctag tgttaccgaa tgtacttttt 180  
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<213> Homo sapiens

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gttataaata tttgttgcat gaatgaaatg tataaaccca tttatgtatg tattttttta 180  
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<213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens

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 <212> DNA  
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 <212> DNA  
 <213> Homo sapiens

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 <212> DNA  
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<400> 5377



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